The American Artisan

THE HARDWARE RECORD

Volume 43.—No. 3. CHICAGO, JANUARY 18, 1902. $2.00 Per Year.

Columbus Bolt Works,

Columbus, O.

Bolts,
Nuts,
Washers,
Turn Buckles,
Bridge and Roof Rods
and
Bolts

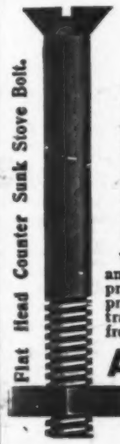
ALL KINDS OF CARRIAGE FORGINGS. ON APPLICATION. CATALOGUE

"Sampson Brand" **PURE ASPHALT ROOFING**

Never Dries Out or Cracks. Planet Brand Tarred Ready Roofing, Slaters' Felt, Building Papers, Roofing Cements, Paints, Etc.

Write us for Prices **J. L. PERKINS & CO.,** 241 Lake St. CHICAGO

Our Facilities



are unsurpassed by any firm in the United States for the manufacture of

Stove Bolts,
Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets,
Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

We have a large *clientele* among stove men who appreciate our high quality, prompt deliveries and attractive prices. Let us hear from you.

Atlas Bolt & Screw Co.,
Cleveland, O.

A UNIVERSAL REMEDY FOR

LEAKY ROOFS.

The valuable qualities of a good roofing cement are firm adhesiveness and elastici These qualities the

AMERICAN SEAL BUILDERS' AND ROOFERS'

ELASTIC OIL CEMENT

possesses. It will adhere firmly to Slate or Metal and will not crack or crumble. It is specially recommended for repairing leaks around chimneys, dormer windows, skylights, scuttles, firewalls and any place that requires fixing on a roof, either Slate, Tin Shingle.

This **Cement** will answer to repair **a roof** when **Solder** can not be used.

MANUFACTURED BY

Wm. Connors Paint Mfg. Co.

TROY, N. Y.

WESTERN AGENTS—J. L. PERKINS & CO.,
241 Lake Street, - - - CHICAGO, ILL.
STOCKHOFF SUPPLY CO., ST. LOUIS, MO.

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are—doing—but—nobody—else—does.

BRADLEY SHELF BRACKETS.

Strong, Light and All Right.
ATLAS MFG. CO., New Haven, Ct.

SAMSON SPOT CORD

Also Massachusetts and Phœnix Brands of Sash Cord.
Samson Cordage Works, Boston, Mass.

Black Diamond Files and Rasps.

PERFECT—ALWAYS

Twelve Medals Awarded.

At International Expositions.

G. & H. BARNETT CO.,
Black Diamond File Works. PHILADELPHIA, PA.

WE MANUFACTURE DAILY AT THEIR RESPECTIVE FACTORIES THE FOLLOWING BRANDS OF FILES AND RASPS:

NICHOLSON,
KEARNEY & FOOT,
AMERICAN,
ARCADE,
GOLD MEDAL,

GREAT WESTERN,
J. B. SMITH,
McCLELLAN,
EAGLE,
"X. F."

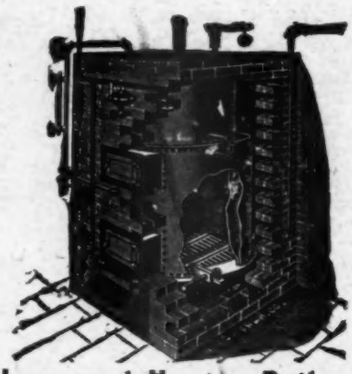
NICHOLSON FILE CO.
Providence, R. I., U. S. A.

BOILERS AND RADIATORS

A Postal Card from you will bring valuable, complete information in regard to the best, most comprehensive, strictly modern line of these goods.

WRITE US TODAY.
New York, Boston, Philadelphia, St. Louis, Buffalo, Minneapolis, Denver, Detroit, London.

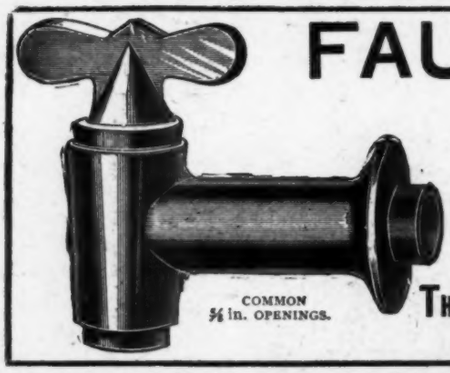
AMERICAN RADIATOR COMPANY
Lake and Dearborn Sts., CHICAGO.



Improved Haxtun Boiler

For Steam and Hot Water Heating. Magazine Feed. For Soft and Hard Coal. 15 years' successful use.

Kewanee Boiler Company, Kewanee, Ill.

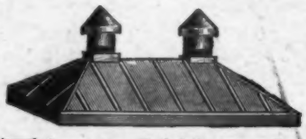


COMMON 5/8 in. OPENINGS.

FAUCETS.

Beer
Milk Can
Oil Can
Cream Separator,
of Various Sizes and Styles.

MFD. BY
THE CLARK NOVELTY CO.
ROCHESTER, N. Y.



"The Illinois"

METALLIC SKYLIGHTS

Are known in every State. Have stood the test for years. Are made in 10 styles and 500 sizes. Complete Skylight, Cornice and Finial Catalogue mailed free.

J. H. JONES, Mfr.,
Lock Box 33. STREATOR, ILL.

"Eagle" Brand Copper Rivets and Burrs.

STANDARD FOR QUALITY. (Lake Superior Copper.)
—MANUFACTURED BY—
THE PLUME & ATWOOD MFG. CO.,
29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.

Largest Variety.
Latest Improvements.
Lowest Prices.
Most Reliable and Economical

1902 will be a Record Breaker

STEAM HEATER.

Heating....

Apparatus

FURNACE.

Furnaces, Hot Water and Combination Steam Heaters.

A Postal Card will bring to you full descriptive Catalogs, Price Lists and Discounts.

The Boynton Furnace Co.

207-209 Water Street, NEW YORK 147-149 Lake Street, CHICAGO

QUICK MEAL

Wickless Blue Flame Oil Stoves.

THE STOVE THAT LEADS

A NEW and strong feature of the "Quick Meal" Wickless Blue Flame Oil Stove is its improved burners, which add to its simplicity, durability—and makes them easy to keep in clean condition. They are well made, attractive in Design and Finish. Only one valve to operate, which makes them easy to sell and easy for the user to understand.

P. S.--"Quick Meal" Steel Ranges have more good practical selling points than any other Steel Range.

RINGEN STOVE Co SAINT LOUIS

Old as the Oldest, New as the Newest.

If you are not, you ought to be selling,

The "New Process" Vapor Stove.

The most popular and successful gasoline stove ever made.

You have made a friend and some money, when you have sold a "New Process." Don't grope in the dark for "maybes," when in the bright light of experience, you can buy a "sure thing" success.

No better recommendation can be given the "New Process," than that the following successful Jobbers, after years of experience still sell it. Write to them or to us now for the agency.

EASTERN JOBBERS.

F. M. Borden & Bro., Philadelphia, Pa.
Eugene Munsell & Co., New York, N.Y.
The S. M. Howes Co., Boston, Mass.

SOUTHERN JOBBERS.

W. B. Belknap & Co., Louisville, Ky.

WESTERN JOBBERS.

Cook & Van Evera Co., Chicago, Ill.
Morley Bros., Saginaw, Mich.
Townley Stove Co., Terre Haute, Ind.
F. Tiemann Stove & Howe. Co., St. Louis, Mo.
Townley Metal Co., Kansas City, Mo.
A. C. Raymer, Omaha, Neb.
M. P. Borden Stove Co., Denver, Colo.

THE NORTHWEST.

Farwell, Ozmun, Kirk & Co., St. Paul, Minn.

PACIFIC COAST STATES.

Holbrook, Merrill & Stetson, San Francisco, Cal.

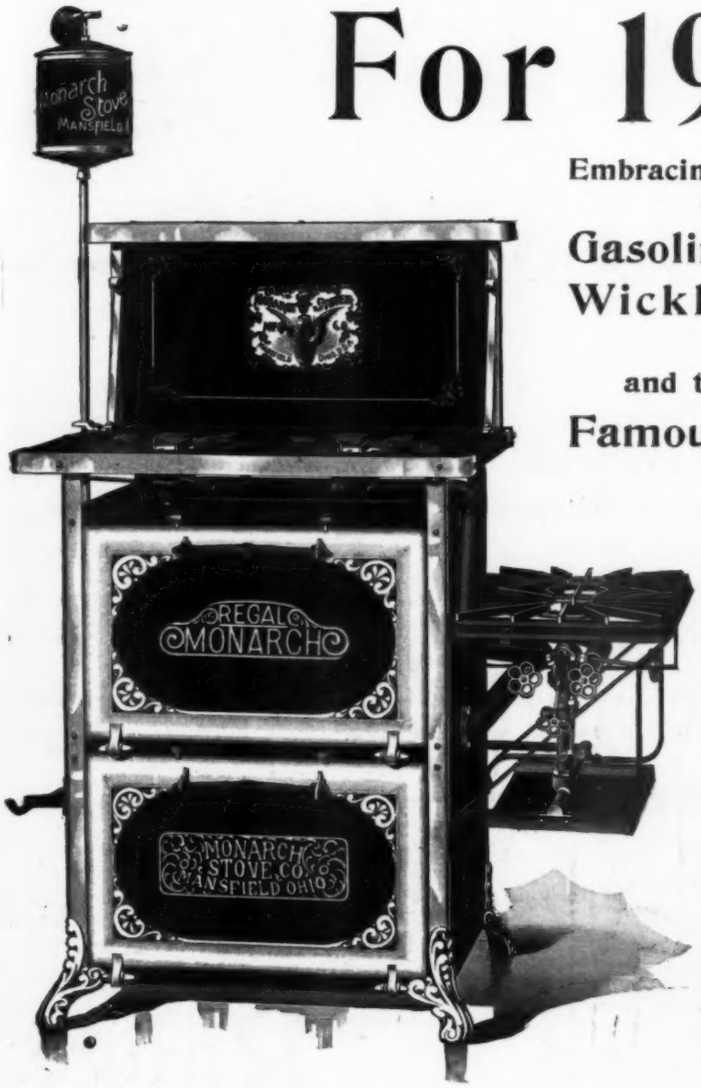
DOMINION OF CANADA.

The Thos. Davidson Mfg. Co., Montreal, Quebec.

The Standard Lighting Co.,

CLEVELAND, OHIO.

The Monarch Line For 1902.



Embracing as it does the most up-to-date and attractive patterns of

Gasoline Stoves,
Wickless Blue Flame Oil Stoves
and the
Famous Monarch Asbestos-Lined Ovens

Will be represented in the Middle West for 1902 by the following Sales Agencies:

H. R. Bruce & Co., Cincinnati, Ohio.
Central Supply Co., Des Moines, Iowa.
Newby Stove Repair Co., Kansas City, Mo.
Bartlett & Norris, Lincoln, Neb.
W. H. Gruenhagen, St. Paul, Minn.
M. F. Stellwagen, in Wisconsin.
Kellogg & Stokes Stove Co., Denver, Colo.
R. P. Smith, Houston, Texas.

The trade in the various states covered by these representatives will be given the very best service possible and their interests vigilantly watched.

Have you a copy of the Catalog?

Drop a Postal in the slot asking for it and it will come forth.

The Monarch Stove & Mfg. Co.

MANSFIELD, OHIO.

National Stoves

Lorain, Ohio. Chicago: 104 Lake St.

The Only Safe Gasoline Stove Made

Insurance

SALES AGENTS:

Eugene Munsell & Co.,	New York.
F. M. Borden & Bro.,	Philadelphia.
Prescott & Co.,	Boston, Mass.
Butler & Johnson,	Syracuse, N. Y.
Pacific Stove Co.,	Los Angeles, Cal.
A. C. Barler Mfg. Co.,	Chicago, Ill.

Harper & McIntire Co.

FOR.. Iowa — Nebraska Kansas—Missouri

Ottumwa, Iowa.

Van's

Pat. Improved Wrought Steel Portable

Range.

For HOTELS, RESTAURANTS, PUBLIC INSTITUTIONS, BOARDING HOUSES and PRIVATE FAMILIES.

All kinds of Hotel Implements for Culinary Purposes.

Manufactured and For Sale by

The John Van Range Co.,

419 Elm and 410, 412, 414 & 416 Home Streets,

CINCINNATI, OHIO.

Snow Balls

Exemplify the principle of success. Every satisfactory stove sold sells another, and every Novelty sale is the nucleus of a large bunch of stove orders.

The wonderful success of our western branch in selling over $300,000 worth of Novelty stoves, ranges and furnaces during 1901 is simply the echo of the dealers' success with these stoves.

1902 is going to be a magnificent stove year, and we are going to sell over half a million stoves at our western branch alone. We have made necessary additions to our equipment all along the line and our 1902 line will be better in every way than it was last year.

Abram Cox Stove Co.

PHILADELPHIA, PA.

Chas. A. Rusco

Manager

Chicago Branch,

15-17-19 West Lake St.

Many a Dealer Has Gone to the Wall

Trying to handle goods that are only made for a few—the "so-called high grade" kind. . . . . .

Willard Steel Ranges "ARE AS GOOD AS THE BEST."

Made to meet the demand of the masses. If you are not already selling them, write and see if you can't secure the agency. Want one dealer in every town in the U. S.

WM. G. WILLARD, Manufacturer,

619 and 621 N. 4th St. ST. LOUIS, MO.

Pussy

is blamed for a great many things—she is in fact the family scapegoat. However no one can blame her for a cold house. That is due to the incapacity of the heater and the remedy is to put in a **Richmond Steam Heater.** There are plenty of other dealers who are making money by pointing out the durability, efficiency and fuel economy of these heaters. Why don't you send for catalogue and learn what our heater is?

Richmond Stove Co., Norwich, Conn.

Chicago Heater & Supply Co., CHICAGO. Rumsey & Sikemeier Co., ST. LOUIS.

BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogs.

MILWAUKEE, WIS.

JEFFRIES

is the **champion** prize fighter.

Lasker is the **champion** chess player.

Fournier is the **champion** automobilist.

The Champion steel range is the **champion** steel range. It has the only double flue Hot Blast construction and is guaranteed to give satisfaction with any kind of fuel. They are finished in Japan and polished steel or Russia iron.

Champion Steel Range Co.

CLEVELAND, OHIO.

We are represented by the following houses: Lee-Glass-Andreesen Hdw. Co., Omaha, Neb.; James Graham & Son, San Francisco, Cal.; Michigan Distributing Co., Lansing, Mich.; J. M. Litchfield, New York, N. Y.; Kettlesen & Degetan, Chihuahua, Mex.; Moore-Handley Hdw. Co., Birmingham, Ala.; Richards & Conover Hardware Co., Kansas City; Chicago Stove and Range Co., Chicago, Ill.; Jacob Retterer, Chicago, Ill.; Corbett, Failing & Robertson, Portland, Ore.; Palmer Hdw. Co., Savannah, Ga.

Ohio and U. S.

Wrought Steel Ranges

We are pioneers in steel range business; old in experience yet adopt modern up-to-date methods. Write for our catalog

Tinnerman Steel Range Co.,

CLEVELAND, O.

JEWEL STOVES AND RANGES..

JEWEL STOVES AND RANGES
DETROIT STOVE WORKS
LARGEST STOVE PLANT IN THE WORLD

A Complete, Well Advertised Line;
Low Prices and Good Workmanship.

Please Write for Catalogue.

DETROIT STOVE WORKS.

Detroit - Chicago.

1902 "Monograms" for "1902"

Because we know we make the best Steel Ranges, Steel Cooks and Cast Stoves, is no reason why we should fold our hands and let good enough alone.

Our 1902 Stoves will prove how we succeeded in improving them. We do not claim to make more stoves than other manufacturers but those we do make are perfect types of the highest order of excellence in manufacture.

We want good Agencies for every town.

The Quincy Stove Mfg. Co.

QUINCY, ILL.

C. J. WORNNEST,

AGENT FOR MICH.

BUY

The Triumph Adjustable Stove Pipes

AND SAVE TIME, SPACE AND MONEY.

The Triumph Adjustable Stove Pipes are easy to put up, and when up need no wire to hold them, as they are solid and tight.

The Triumph Adjustables are here to stay,
And their demand is gaining day by day.
Their venture has gained great renown
In city, country and in town.

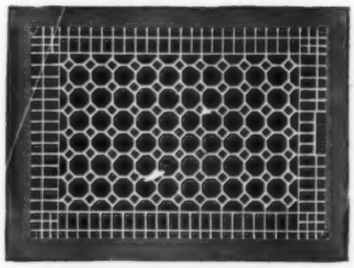
Write for Prices, etc.

The Triumph Adjustable Stove Pipe Mfg. Co.

JOLIET, - - - ILL.

Henry & Scheible Co.

SUCCESSORS TO T. R. HENRY.
10 Long St. CLEVELAND, O.



ALL SIZES—ALL STYLES OF FINISH. PROMPT SHIPMENTS
Quality and finish unexcelled.

SEND FOR CATALOGUE.

Registers and Ventilators.

A Full Line, Unique Designs.

Quality and finish unexcelled. All styles of finish, from Japanned to Gold Plated.

Send for Catalogue:

The Philadelphia Hardware and Malleable Iron Works
Philadelphia, Pa.

All Cast Iron, Double Radiator.

QUALITY FIRST

IS THE PRINCIPLE FOLLOWED IN THE MANUFACTURE OF

MUELLER

FURNACES AND BOILERS

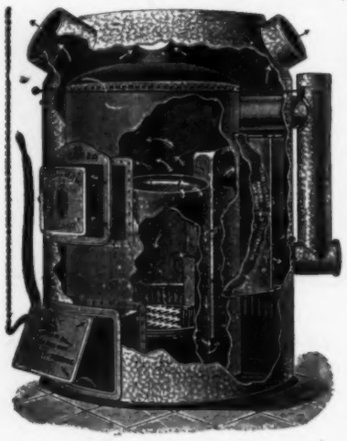
Made in All Styles—For All Kinds of Fue

Get Our Special Register Offer

EVERYTHING IN THE HEATING LINE

For Wood.

191 Reed St. **L. J. MUELLER FURNACE CO.** Milwaukee, Wis.

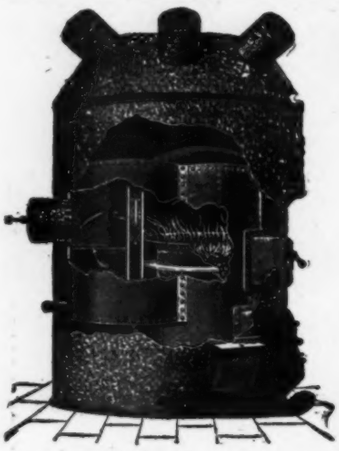


Quaker

furnaces, also Panama, Hoffman, Low Down and combination hot water. Quaker Time Clock Regulator, Side Wall Registers, Pipe and Fittings and a full line of furnace supplies. A complete outfit for installing a warm air or combination plant all supplied by us made at our own foundry and machine shop and works. Live agents wanted. Send for prices and catalogues. Special attention given to complete plant orders and car-load lots.

Wireton Heating Co.

FACTORY AND OFFICE, BLUE ISLAND, ILL. CITY OFFICE, 40 DEARBORN ST., CHICAGO



Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING Furnace.

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

Is Absolutely Safe.

Handy Pipe.

Manufactured by

Meyer Furnace Co.

Send for Catalogue. PEORIA, ILL.

F. J. Brazda, Dodge, Neb., writes

"Please take 'Flanders circular shears' out of my 'for sale' ad. I sold them two days after they were advertised. As an advertising medium The American Artisan stands *First* in its class."

CATALOGUE SHOWING

Gas Ranges — Cast Cooks
Steel Ranges — Cast and
Cast Ranges — Steel Heaters
Steel Cooks — Hot Plates

WILL BE FURNISHED FOR THE ASKING BY

Enterprise Stove Co.
VINCENNES, IND.

The Torrid Zone Furnace

will make you more money than many others.

First, because it gives your customer satisfaction.

Second, it is easily set up and cased.

Third, it has points of merit that others do not have to point out to the customer.

Fourth, the price is right. We give you your choice between a cast iron and brick lining at the same price.

Write for catalogue and prices on Hot Air Furnaces and Combination Heaters.

Lennox Manufacturing Company
Cor. 9th Ave. & Frederick St., Marshalltown, Iowa.

PALMER'S

World Renowned Phœnix Furnaces

with direct, indirect and reversed draft.
Made in six sizes.
The greatest heater in the world.
Portable, Brick or Combination Form.
Permanently gas and dust tight.
Write for catalogue.

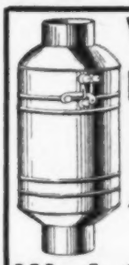
Phœnix Iron Works
UTICA, N. Y.

The Star Extension Stove Back

Adjustable in width from 4½ to 7 inches; in length from 14 to 22 inches.

The corrugations prevent ashes from lodgment on the back. It can be easily fitted into any stove.

The Schreiber & Conchar Mfg. Co.,
DUBUQUE, IA.



We Protect Dealers

Who handle Burton's Fuel Economizer.
A trial order will convince you.

W. J. Burton & Co.
Manufacturers,
164-166 W. Larned St., Detroit.

Bee Sharp

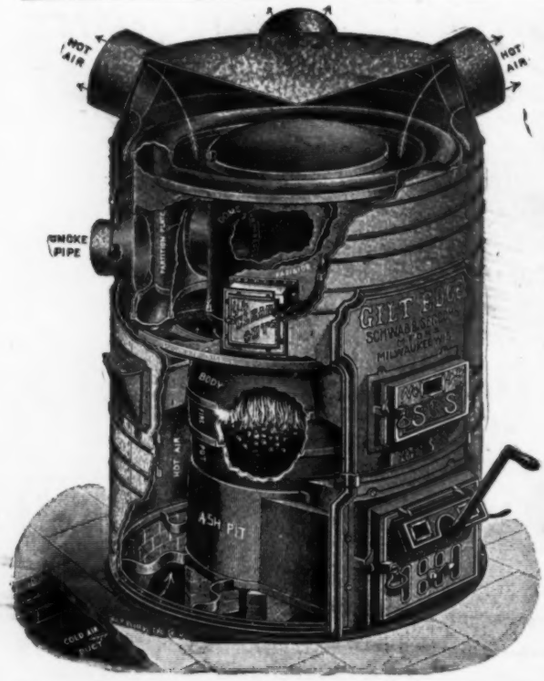
...and buy the...

Sheet Metal Workers Guide.

A Practical Handbook for Tinsmiths, Coppersmiths and Zinc Workers. A collection of rules and diagrams for describing the most useful patterns ordinarily required, preceded by chapters on Sheet Metal Work, Soldering, Geometry as applied to Sheet Metal Working. By W. J. E. CRANE. Price, postpaid, 60 cents.

DANIEL STERN,
69 Dearborn St., Chicago.

O. C. Jamison, Homer, Ill., writes: "I FIND MY ADS. IN YOUR ESTIMABLE JOURNAL HAVE BROUGHT GOOD RETURNS."

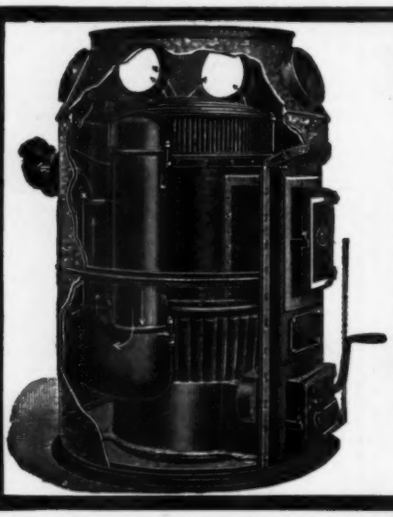


Gilt Edge Warm Air and Combination Heaters

have merits that are all their own. They are made in a large variety of styles and sizes, each adapted especially to a certain class of fuel. We are manufacturers of a complete line of warm air registers, safety pipe and tin galvanized iron furnace fittings.

R. J. Schwab & Sons Co.

MILWAUKEE, WIS.



The Shoe Dealer

who kept only 3 or 4 sizes of shoes would be considered crazy, and yet there are retail furnace men who handle a line of furnaces that is not large enough to meet the furnace requirements of their city. These dealers should take an agency for the Floral City warm air and combination heaters, made in 15 different types, for all classes of work and all classes of fuel.

Monroe Foundry & Furnace Co.,

Monroe, Mich.

Emperor Furnaces

For Wood

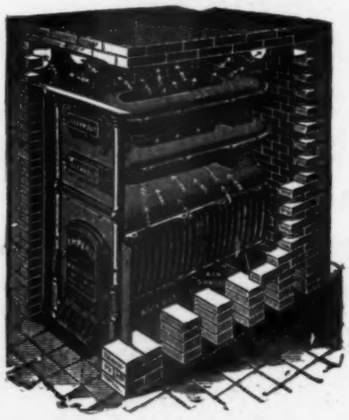
Simple. Safe. Durable.

The Best and Cheapest Line of Wood Furnaces.

Furnished for Either Brick or Galvanized Iron Casing. Send for Catalogue.

Bergstrom Bros. Co.

Neenah, Wis.



Henry E. Davis, Girard, Ohio, writes: "Please discontinue my advertisement in your want column for a tinner. I have found one and think your paper is all right and your want column is all right, for letters of application come thick and fast."

Smith Water Heaters.

A Combination of hot air and hot water is the best method of heating a residence and the only method that gives a supply of fresh air.

Smith's Hot Water Specialties have a national reputation. They can be placed in any kind of hot air furnace, steam or hot water boiler.

A Combination will make your house comfortable; will save fuel.

Many houses have rooms they don't heat, in these our **Combination** can be used to increase the capacity of furnace, steam and water boiler.

Any live dealer wanting business can get it by talking **Combination.**

Every home needs hot water in the kitchen.

You can't afford to experiment with jointed coils or attachments.

Smith's Specialties have no joints.

There are thousands of them in use. They are always satisfactory. Hundreds of the best dealers handle them.

Send for Catalogue Giving Dimensions, Capacities and Prices.

Hero Cast Iron Furnace

(Made in five sizes)

Is the Best for a Cold Climate.

Has deep ash pit, cup joints, corrugated fire pot and dome. **With reversible flue, heat passes around the radiator twice, and saves fuel.**

Smith's Triangular Revolving Grates

have great strength. Each bar is looped separately. The replacing of any bar is an easy matter.

Always satisfactory.

Thousands in use.

There is no furnace that will give better satisfaction than the "Hero."

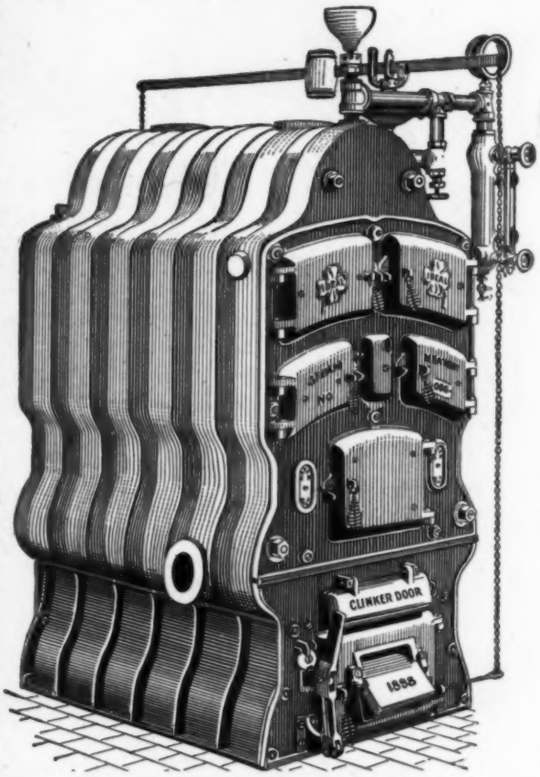
Suitable for hard or soft coal.

Write us for descriptive matter.

MANUFACTURED BY

Chas. Smith Company

122 Lake Street, CHICAGO.



Ideal Sectional Steam Boiler.

Ideal Boilers

will be more popular than ever in 1902; and we shall be prepared to give even better service than during the past busy year.

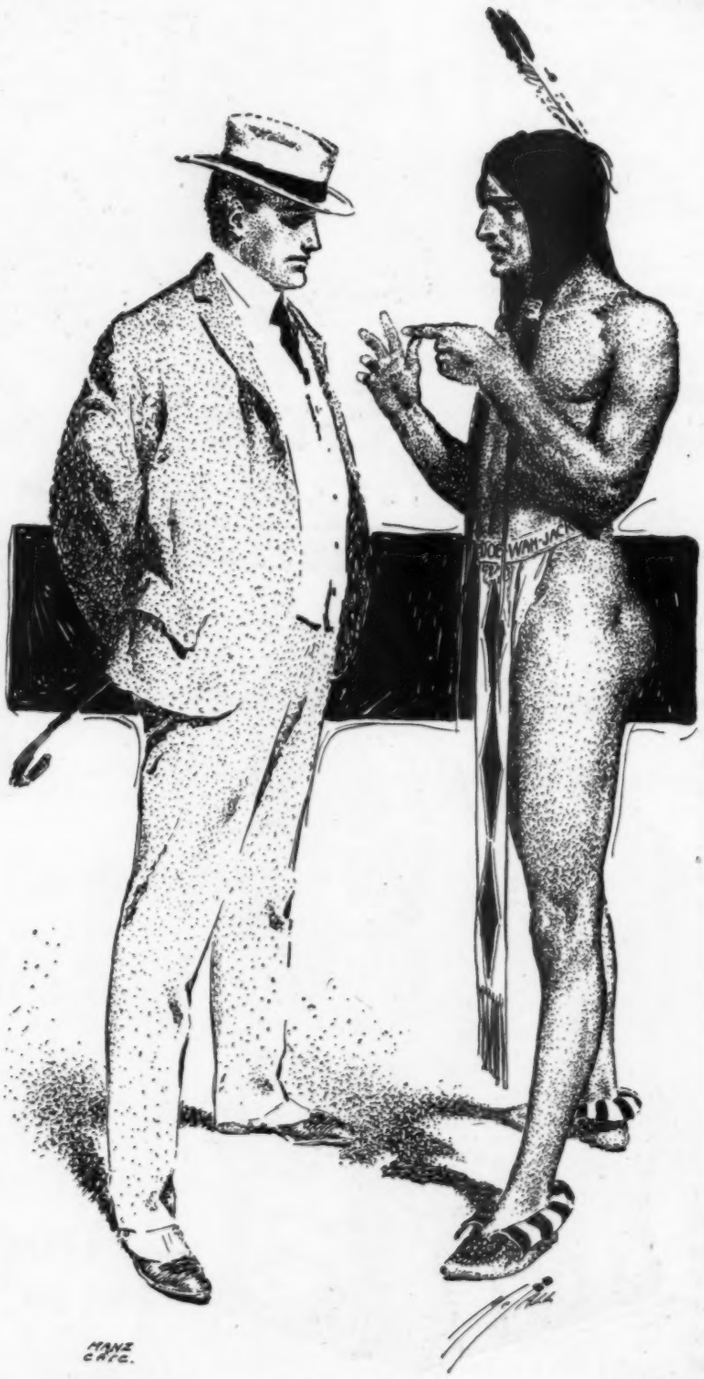
Have you our Catalog?

American Radiator Company

Chicago, New York, Philadelphia, Buffalo; St. Louis, Minneapolis, Denver.

ROUND OAK STANDARD OF AMERICA

The Round Oak Standard Range and Cook was produced entirely in our own shop. We designed it, made the patterns, flasks—and every detail connected with it is our work. Several prominent merchants throughout the country have written us, unsolicited, that it is the best example of cast range making they have ever seen. Merchants are not going to take the trouble to write enthusiastically about a cast range now days unless the workmanship and working qualities are markedly superior to the multitude. Take a moment off, ask us for details about this range—provided, of course, you like to sell good goods.



Estate of

P. D. BECKWITH

Dowagiac, Mich.

MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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DANIEL STERN, Publisher and Proprietor,
69 DEARBORN STREET, CHICAGO, ILL.

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This Paper is a Member of the Chicago Trade Press Association.

CHICAGO, JAN. 18, 1902.

THE Pan-American Congress, in session in the City of Mexico the past week, considered the question of arbitration favorably.

ACCORDING to Dun's Review there has been a material increase in the cost of living during the past four years. July 1, 1897, the total cost of the annual necessities of life for one person was placed at $73.45. The first of January, 1902, they had increased to $101.58.

THE United States is at the head of the list of great nations as regards wealth, according to the London Daily Mail Year Book for 1902. The figures being, United States, £16,350,000,000; United Kingdom, £11,806,000,000; France, £9,690,000,000; Germany, £8,052,000,000, and Russia £6,425,000,000. While the United States heads this list of countries in its wealth, it shows the smallest national indebtedness.

THE action of the Michigan Retail Furniture Dealers' Association in holding a meeting in Chicago has stirred up quite a discussion in the ranks of that organization. It is a perilous thing for a state association to go beyond its own confines, and it is to be hoped that various state hardware organizations will continue the excellent policy that has guided them in the past, of turning a deaf ear to any and all attempts of manufacturers to induce them to meet beyond the confines of their commonwealth.

THE latest financial device is unquestionably the automobile savings bank, which has made its appearance in France. The car travels about the country making prearranged stops of an hour or two at the various villages. The passengers are two clerks of the treasury administration and a cashier. The third is empowered to receive moneys. The scheme is devised by the French authorities to encourage thrift among the peasantry. They decided to send the savings bank to the country folk instead of waiting for the latter to find time to come to the bank offices.

JAMES L. MCWHORTER, of Nashville, Tenn., in a recent article on federal bankruptcy legislation, calls attention to a greatly needed amendment to the present statute in the following language: "Congress should by all means amend the voluntary feature of the law so as to preclude from its benefits all persons owing less than $500. The virtue of the law has been outraged by great numbers, who, owing small sums for food and clothing to retail dealers, have obtained their discharge, hence, when you come to consider the indirect and collateral benefits that flow from this law, it will be found to have helped the comparative few engaged in the wholesale trade and manufacturing at the expense of the many engaged in retail trade."

THE Senate Committee on Commerce has reported favorably on the bill creating a new cabinet officer who shall be styled the Secretary of Commerce. Our merchants have consistently demanded the creation of such a department. A New York paper, in urging the passage of this bill, says: "The wealth and power of nations are based on their commercial activity, and everything should be done for the encouragement of enterprise which fosters that activity. Heretofore the work of our government in this direction has been entrusted to several different departments, so that it has lacked that effectiveness which can be secured only by the unity of purpose which a special department would develop. Of course, all the different details of this commercial branch of government work would naturally be transferred to the office of the Secretary of Commerce, when that officer is appointed, and the result ought to prove of inestimable advantage to the business interests of the country."

SHALL it be Nicaragua or Panama? The great ditch which it is proposed to dig to divide the two Americas is a subject that is interesting every American. The French company, which has failed in its efforts to construct the Panama canal, is now trying to sell the partially completed channel to the United States. At first the company wanted $109,141,500, but now, according to the report, they are willing to sell for $40,000,000. They say they were forced to this step to avoid ruin, which is inevitable should the United States decide to build the Nicaragua canal.

It is the current belief that it will take eight years to finish the Panama canal, besides two years for preparation. The Nicaragua canal can be finished in six years after the two-year preparatory period is over. The Panama canal is 49 miles long; the Nicaragua is 183.66. The Panama route would also have a lower summit elevation and less curvature. It would cost $1,350,000 less a year to maintain than the Nicaragua canal. It would take a draught vessel 12 hours to pass through the Panama canal and 33 hours to pass through

the Nicaragua. Winds for sailing vessels and hygienic conditions favor Nicaragua. The Panama would be a shorter route for commerce to our Atlantic ports and to the west coast of South America. The Nicaragua would save a day between the Pacific coast and any port on the Atlantic. It would make the same saving between our Atlantic ports and China, Japan and the Philippines. It costs from $250 to $3,000 a day to operate an ocean vessel. Making the average $1,500 for each vessel, the Nicaragua canal would mean a saving of $15,000 a day to vessels bound going to and from these ports, on the supposition that only ten should pass through each day. This would amount to more than $5,000,000 a year.

The cost of building the Nicaragua canal from the beginning is estimated at $189,964,062. The cost of finishing the Panama canal is estimated at $144,233,358. Already about $300,000,000 has been spent on the Panama. The Panama route would carry with it little or no commercial development, but would be simply a means of communication between the two oceans.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

The program for the forthcoming convention of the Iowa Retail Hardware Dealers' Association is out. This meeting will be held Feb. 18, 19 and 20, and the headquarters of the association is scheduled for the Savery Hotel. It would appear that the committee in charge made a grievous mistake in selecting this hotel, as these two letters, received by gentlemen contemplating attendance at the convention, would indicate:

Des Moines, Iowa, Jan. 15, 1902.

Mr. Blank, Blankville.

Dear Sir:—Replying to yours of the 14th inst., I regret to say that, on account of the legislature being in session, it will be impossible for us to promise you a single room during the coming hardware dealers' convention. The best we can do is to reserve a room with the understanding that you are either to furnish a roommate, or allow us to assign some one else to occupy the room with you. If this is satisfactory, please advise me at once, and I will enter your name accordingly in our engagement book. Yours truly,

W. L. Brown, Mgr.

Des Moines, Iowa, Jan. 15, 1902.

Mr. Dash, Dashville.

Dear Sir:—Replying to yours of the 14th inst., I regret to say that, owing to the legislature being in session during the coming Hardware Dealers' Convention, that we will be unable to promise you a room with bath, or in fact a single room of any kind. The best we can possibly do is to promise you a comfortable place to sleep in a room with others. Should you desire accommodations reserved with this understanding, please advise me at once, and I will do the very best I can for you under the circumstances. Yours truly,

(Signed) W. L. Brown, Mgr.

I have seen other letters of the same general tenor, which would go to show that even those trying to engage rooms over a month before the convention are up against it. This attitude on the part of Manager Brown very clearly indicates that he is not particularly desirous of having the association make his hotel their headquarters during the convention. It cannot be gainsaid that it is Mr. Brown's privilege to take this stand, but one wonders why the committee in charge should have picked a hotel that will be unable to accommodate the visiting delegates and friends. Des Moines is a splendid location for an Iowa convention, but it seems strange that the committee did not choose the Kirkwood or the Aborn or some other hostelry as a headquarters, that was in a position to accommodate the visitors. The cramped accommodations offered by the Savery preclude the possibility of manufacturers' exhibits in conjunction with the convention, which were so successful a feature of the Dubuque meeting last year.

When this association held their convention at the Savery, Des Moines, two years ago, the unexpectedly large attendance was some excuse for the congested condition of affairs. It is, however, strange that with the lesson of their previous meeting fresh in their memories, the committee in charge should again choose this hotel. It is gravely to be feared that this choice will not only greatly inconvenience all dealers who attend this convention, but will also seriously curtail the attendance.

The committee should certainly, in my opinion, change the headquarters. They have ample time to do so.

* * *

I noted an interesting advertisement in one of the dailies the other day concerning an eastern steel plant which was selling a mere bagatelle of 40,000 shares of stock at $5 per share, to make some improvements to a plant 200x130 feet in size. The products of this plant are very superior, as they "are of strictly pure steel of *uniform* hardness and *softness* throughout," and the $200,000 they hope to raise ought to make quite a large addition to a plant of this size. In their pleading for popular subscriptions, this plant advertises as follows:

"The manufacture of steel has been, up to within a few years, a comparatively infant industry. It is in expanding and developing this branch of the Nation's wealth that the greatest successes of the future are to be looked for. Steel today is in such a position that it is right to invite capital toward its advancement. It is the mission therefore of everyone interested in the development of this resource to see that the industry is afforded every possible encouragement to put it to the front and let it speak for itself, for if this is done it will raise up its own friends and rally its own supporters."

Surely, the American people should respond generously to such a plea! Are we not all interested in the development of the American steel industry? Should we not encourage steel to go to the front? Verily, the ways of the man advertising stock for sale are deep!

* * *

A successful St. Louis merchant says that any man who can afford to open a store can afford to advertise. "Advertise," is his advice, "even if you can take but two inches of space in a leading newspaper. Fill your two inches in a way to make them a feature of the paper. Make your 'ad' a daily bulletin of your business—a news item from your store."

News Siftings.

The Washington Window Glass Factory at Ithaca, N. Y., has closed down.

The Western Implement Dealers' Association met at Kansas City, Jan. 14-16.

The Western Box Manufacturers' Association met at Indianapolis, Jan. 16-17.

The Storrs Mica Co. are a new Owego, N. Y., concern, capitalized at $125,000.

It is said that the Republic Iron & Steel Co. will shortly remove their Brazil, Ind., turnbuckle plant to Terre Haute, Ind.

The Avondale Stove & Foundry Co., Avondale, Ala., are about to erect a stove and hollowware plant at Birmingham, Ala.

The Carl Anderson Co., 23-27 North Clinton street, Chicago, send us a circular showing a cut of their "Gus" gas and gasolene engine.

The Great Western Glass Co., capitalized at $1,000,000, are a new Chicago concern which is said to have been organized to fight the glass combine.

Joseph T. Ryerson & Son, Chicago, iron and metal dealers, are erecting a new warehouse 250x250. This will about double their present storage capacity.

The Joliet Stove Co., Joliet, Ill., gave a very pleasant holiday outing to their office force. This consisted of a trip to Chicago, an elaborate dinner and an evening at Powers' Theatre.

The Gold Coin Stove Co., Troy, N. Y., have rented the old Eddy Foundry, Hoosick street and Fifth avenue, that city, and are altering it to meet their requirements.

Robert Grant, Frank Williams and Alfred K. Barker are the incorporators of the Grant-Williams-Barker Co., of Rockaway, N. J., capitalized at $200,000, to manufacture iron and steel.

The Dominion Iron & Steel Co., Sydney, Cape Breton, have during the past two weeks booked a large number of orders for steel billets in the New York market.

Archer Brown, of Rogers Brown & Co., Cincinnati, in a recent interview declared that he did not believe there would be any formal advance in pig iron prices in the near future.

The rumor that C. W. Reals has left the Keeley Stove Co., Columbia, Pa., is declared to be false, as he is still their Ohio, Michigan and Chicago representative.

George M. Clark & Co., Chicago, are getting out a little match box, advertising their Jewel gas stoves. On each match is a different sentence exercising some point of Jewel excellence.

A cat has nine lives, it is said, and the moribund stove trust has certainly that many. A meeting of gentlemen who, at different times, have essayed the role of resuscitators of this sickly combine, will be held Jan. 21, for the performance of final obsequies.

C. H. Hoffstetter, who is a widely known gas stove man, has associated himself with the Cleveland Steel Range Co., Cleveland, Ohio, and will have charge of their gas range and appliance department, and he will strive earnestly to place the Grand Ideal and the Gem Ideal gas ranges at the head of the line.

The death is announced of Edward R. Janes, of Janes & Kirtland, New York City. Mr. Janes was in his seventy-third year, and while a young man joined the firm of Janes, Fowler, Beebe & Co., manufacturers of stoves, ranges and furnaces, his father being the senior partner of same. Mr. Janes leaves a wife, four sons and two daughters.

The Pacific Stove Co., Los Angeles and San Francisco, send us a dainty little booklet entitled "Vistas de Los Angeles," which shows eucalyptus blossoms, bird's eye views, the head of a Chinese dragon, etc. This firm are about to place on the market a new oil heater which will be named the "Pacific." It has been arranged to burn the cheaper grades of California oil.

The Kalamazoo Stove Co., Kalamazoo, Mich., expect to have their plant in running order during the latter part of February next. They will style their line the Kalamazoo stoves and ranges. Their buildings will include a one story molding room, 150x120 feet in dimensions, a factory and warehouse adjoining the molding room, 200x150 feet, and a power house containing two boilers, dynamos, etc.

Christopher Zug, the oldest iron and steel manufacturer in the United States, died at Pittsburg, Jan. 13th, in his 94th year. He founded the house of Zug & Painter 50 years ago.

Mr. Zug had been blind for years, but until two weeks ago he attended to business regularly, being driven daily to his office in a carriage and carried into the office in the arms of a negro servant.

Frank Happell, of the Frank Happell Manufacturing Company, 435 East Pearl street, Cincinnati, manufacturers of metal polishes and paints, on January 7 sold his interest in the business to his partner, Julius Bepler, who will change the name to The Atlas Paint and Specialty Company. Mr. Bepler has been a prime factor in building the business up to its present proportions and expects to materially increase its output the coming year.

The Triumph Adjustable Stove Pipe Co., Joliet, Ill., manufacturers of the Triumph adjustable stove pipe, advise us in a recent favor that they at present occupy 3,000 feet of floor space and intend adding 4,500 feet more. It is their intention to put in an equipment of new machinery for the manufacture of pipes, also for the make of knock down elbows, made in two halves pressed, that will nest in small space.

We are indebted to the Phillips & Clark Stove Co., Geneva, N. Y., manufacturers of the Andes stoves and ranges, for an attractive "Daily Reminder" for the year just begun. This is neatly bound in a heavy black cardboard, and the spaces for memoranda are printed in a

neat green, with the day of the month in red. One of these reminders will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Coöperative Foundry Co., Rochester, N. Y., send us a handsome red and gold calendar for 1902. The days of the month are given in white letters on a red background. This calendar has a handsome black background with gilt lettering, and is provided with a brass chain, so it may be hung on the wall. It is certainly an eminently serviceable calendar for every day use. It will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

Chas. W. Goodnough is sending out an announcement to the trade, stating that he has acquired an interest in the Prizer-Painter Stove & Heater Co., Reading, Pa., and will hereafter have sole charge of their business in western Pennsylvania, West Virginia, western Maryland, Ohio and Kentucky. Their Pittsburg headquarters will be located at 717 Grant street, where their ample warehouse and office facilities will enable them to serve the trade promptly and satisfactorily.

The Standard Lighting Co., Cleveland, Ohio, send us a little circular describing their improved Standard smokeless oil heaters. The wick in these heaters has an automatic extinguisher. The fount is made of a heavily coated terne plate and is lacquered inside. This heater is made of sheet metal and is light and durable. The base is finished in antique copper and the upper part has aluminum bronze trimmings. This heater is suitable for the bath room, sitting room, bed room, camp or cottage.

W. E. Hartman is president, W. F. McCrea is vice-president and manager and Charles F. De Long is secretary and treasurer of the Keystone Foundry & Mfg. Co., Versailles, Pa. This firm occupy a building 30x12, two stories in height, as a fitting room, polishing room, stock room and pattern shop. They have erected a new building 60x100 feet in dimensions, and on January 6th poured their first heat. They expect to make a full line of gas ranges, coal stoves and ranges, coal heating stoves, castings of various kinds, etc.

Bergstrom Bros. & Co., Neenah, Wis., manufacturers of Royal stoves and ranges, will be represented on the road during 1902 by the following efficient traveling corps: C. S. Youngs will call on dealers in Wisconsin and Upper Michigan; W. F. Carrott will have northern Minnesota and North Dakota for his territory; G. B. Emerson will travel in northern Iowa, southern Minnesota and South Dakota; W. A. Wilson will explain the merits of Royal stoves and ranges to central Iowa dealers, and H. L. Loomis will have Illinois as his territory.

Hubert E. Peck, patent attorney, 629 F street N. W., Washington, D. C., has issued a folder calling particular attention to rejected patent applications. Many applications are rejected because the "points" were not discovered or understood, or the applications were not presented in a manner to properly define and make clear the novelty and advantages of the invention. Other reasons are given for rejections. Mr. Peck has made a specialty for a number of years of taking up, studying into and repreparing the previously rejected applications of inventors and manufacturers, and in many cases has thus secured valuable patents in this and other countries.

The Detroit Stove Works, Detroit, Mich., are manufacturers of a variety of popular stoves, including the Detroit Jewel gas ranges. These ranges, Nos. 17th and 18th series, have body of smooth, cold-rolled, open-hearth steel, lined throughout with asbestos. The oven linings are in sections and are easily removed and replaced. The bottoms of upper and lower ovens are flush with the door openings. A double steel bottom with non-conducting air space prevents burning of the floor. The top plate grates and shelves are made of strong cast iron. There are four drilled, star-shaped, tip burners, one a giant burner of triple capacity, with simmering frame. The front feed pipe is nickeled and the pipe work is easily removed.

The Excelsior Stove & Mfg. Co., Quincy, Ill., are manufacturers of the National stoves and ranges. One of their popular trade winners is the National steel range for hard coal, soft coal or wood. The body is made of wrought steel, of extra heavy gauge, designed for durability. It has heavy asbestos lining throughout, which is reinforced by steel and cast linings, making a triple body in all its exterior parts. The top plate is covered with asbestos sheet, protected in front by overlapping cast lining, and on the rear with wrought steel brace. The nickel trimmings consist of oven doors, warming closet door, drop feed door, draft door, ash door, all edges on upper warming closet and high shelf, tea-pot shelves, panels on oven door, warming closet door and reservoir, and towel bar, full length of range top.

A touching tribute to the late Wm. Cribben, Sr., foreman of the Cribben & Sexton Mfg. Co's stove foundry, Chicago, appears in the last issue of the Iron Molders' Journal, and is written by the corresponding reporter of the Iron Molders' Union, No. 23:

"He was born in 1836, and after learning the trade of molding in Rochester, worked in St. Louis and Quincy, and, returning to Rochester, became a member of No. 12 in 1858 and remained a consistent member of same till the day of his death. In all matters affecting the relations of members of the union and their employers he believed fair and honest treatment should be rendered to each. The beautiful floral pieces furnished by the men of each department bore silent testimony of the sympathy and respect in which he was held by those with whom he had been so long associated."

The Peninsular Stove Co., Detroit, Chicago and Buffalo, send us a little booklet entitled "The Age of Steel," which gives a number of pointers concerning the Peninsular planished steel ranges. Each plate in their ranges is cut, formed and punched by specially constructed machinery, and they fit together with exact precision, preventing unequal expansion or strain. Double walls of steel, asbestos lined, form the body of the range, concentrating the heat in and around the

oven. The grate, whether duplex, flat or wood, can be withdrawn from the Peninsular planished steel range without the removal of a single plate or bolt. The fire box is lined with thick firebrick for hard coal, and heavy long lasting sectional linings for soft coal or regular wood fixtures, as desired. The great number of sectional cuts in this booklet give a very clear idea of the constructional excellence of these ranges.

The Phillips & Clark Stove Co., Geneva, N. Y., makers of the Andes stoves and ranges, are getting out some very pretty memorandum books with celluloid covers. This book, besides pages for memoranda, calendars, etc., contains a fund of valuable miscellaneous information, as follows: antidotes for poisons; fastest railroad time; fastest time around the world; foreign coins, with their value in United States money; foreign weights and measures and their American equivalents; help in case of accidents; interest tables, from 6 to 20 per cent.; measures of length, square measure, cubic measure, metric equivalents; official population of the United States; official population of cities in the United States over 25,000 inhabitants; one hundred largest cities of the world; rates of postage, money orders, registration, and foreign postage; standard time of the world, and war revenue tax, now in effect.

One of these books will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Novelty Stove & Mfg. Co., Savannah, Mo., have built a substantial plant for the manufacture of the Howard air-tight stoves. Their main building is 60x100 feet in dimensions, and their foundry and nickel-plating plan is 60x80 feet. This firm is arranging to open transfer houses in Kansas City, Kan.; Lincoln, Neb.; Denver, Col.; St. Louis, Mo.; Chicago, Ill., and some Ohio point. This stove has a hot blast and partial over draft which saves fuel. A corrugated bottom and corrugated sides present increased heating surfaces. This firm also handle a full line of ranges, cooks, common heaters, camp stoves, etc.; also all grades of pipe, elbows, dampers, stove boards, stove lifters, mail boxes, coal hods, wash boilers, measures, oil cans, etc.

This firm are manufacturers of the Duquesne and Economy hot plates. The Duquesne has large flush top, and is fitted with efficient drip-proof burners, gas cocks with hardwood handles that keep cool, large feed line and mixers with adjustable shields. The center foot construction gives a large heating surface.

The Simpson Stove & Mfg. Co., Twenty-Sixth street and Liberty avenue, Pittsburg, are now erecting buildings at Canonsburg, into which they contemplate moving about April 1st.

These buildings will comprise a complete and modern stove plant, consisting of foundry, milling and plating room, tin and sheet metal shop, machine shop and mounting shop, with all out buildings, such as japanning ovens, sand sheds, etc. These works are situated on the P. C. C. & St. L. R. R., which is one of the operated lines of the Pennsylvania Co., giving this firm exceptional shipping facilities to all points and the benefits of the Pittsburg freight. They expect to make, in addition to their present line, a line of steel ranges.

The new company, which was incorporated December 9th, succeeds the old company under the same name, which has been in business here for twelve years, manufacturing gas ranges, gas heating stoves and appliances generally. The officers and directors of the new corporation are as follows, viz:

President—H. Prescott Simpson.

Secretary and Treasurer—Samuel S. Munnell, Jr.

Directors—W. J. Gowern, of Canonsburg, Pa.; W. L. Clark, of Pittsburg, and George A. Simpson, of Pittsburg.

PRETTY DRAWING BOOKS FOR CHILDREN.

The Home Stove Co., Indianapolis, Ind., get out a number of drawing books which will prove very interesting to the little ones. These are respectively entitled "Little Pets," "Mother Goose," "The Merry and Wise," "The Happy Day," "Our Darlings," and "The Comic." Dealers will find that the children in their localities will be greatly pleased with these pretty and useful booklets, and should write this firm for the series. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

HARDWARE BARGAINS.

The Chicago House Wrecking Co., West Thirty-fifth and Iron streets, Chicago, purchase merchandise from sheriffs' and receivers' sales, which they offer the trade at very attractive prices. For instance, they are offering 750 dozen No. 616, "D" handle, square point shovels at the low quotation of $5.25 per dozen. This firm have a number of combination monkey wrenches on hand, made of malleable iron, that they are quoting at 90c per dozen.

This concern are certainly a factor in the register market, as they are offering strictly new registers at 75 and 10 per cent off the old list.

They have stocked up with horse and mule shoes, which they are selling at $2.50 a keg for light shoes, and $2.60 a keg for heavier shoes.

Among their recent advantageous purchases, is one of a quantity of attractive padlocks, which will be sold the trade at the bed-rock price of $6.75 per gross.

At a recent sheriff's sale this firm purchased 2,500 electric ring door bells, which have many features of exceptional merit. The gongs are full nickel plated, with plain bronze rosettes. These are being sold at $5.00 a dozen.

This firm would be pleased to send the trade their confidential list No. 70. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

"What are these things?" asked the customer.

"Blackboard erasers," said the shop girl.

"I don't want anything that will erase a blackboard. I want a chalk mark eraser."

"That's what I meant. These are chalk mark erasers. Anything else?"

"Yes. I want some lead pencils."

"We haven't any lead pencils. We have some wooden cylinders with graphite on the inside of them. Will they do as well?"—Chicago Tribune.

The Hardware Record.

American Hardware Manufacturers Association.

Pres., Fayette R. Plumb, Philadelphia.
V.-Presidents, Samuel Nicholson, Providence; C. S. Van Wagoner, Cleveland, F. S. Kretsinger, Fort Madison, Ia.
Secy-Treas., F. D. Mitchell, Pittsburg.
Ex. Com., Robert Garland, Chairman, Pittsburg; Henry B. Lupton, Pittsburg; N. A. Gladding, Indianapolis; W. S. McKinney, Allegheny, Pa.; Samuel Disston, Philadelphia; C. E. Adams, Cleveland; James P. Kelly, Alexandria, Ind.; J. C. Birge, St. Louis.

Arkansas Retail Hardware Dealers' Association.

Pres., John M. Pitman, Prescott.
1st V.-P., J. F. Maxey, Ozark.
2d V.-P., T. B. Stewart, Newport.
Secy-Treas., J. A. Plummer, Marianna.
Ex. Com., H. Williams, Hot Springs; J. H. Boicourt, Little Rock; J. W. Lee, Fordyce.

Chicago Retail Hardware Dealers' Association.

Pres., D. McLaughlin.
V.-P., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Association of Philadelphia.

Pres., Hugh McCaffrey.
V.-P., Wm. C. Peters.
Sec.-Treas., T. James Fernley.
Directors, William W. Supplee, Samuel Disston, John H. Griffith, James H. Ritter, William C. Peters, Thomas Devlin, Fayette R. Plumb, Hugh McCaffrey, T. James Fernley.

Illinois Retail Hardware Dealers' Association.

Pres., H. G. Cormick, Centralia.
V.-P., Wm. Bittel, Peoria.
Sec., G. R. Lott, Chicago.
Treas., F. F. Porter, Chicago.
Ex. Com., Z. T. Miller, Bloomington; W. T. Gormley, Chicago; H. N. Murphy, Galesburg; C. Mauer, East St. Louis; C. Williams, Streator; L. Babst, Kankakee.

Indiana Retail Hardware Dealers' Association.

Pres., W. P. Lewis, New Albany.
V.-P., Jas. L. Hutton, Portland.
Sec. and Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

Indian Territory Retail Hardware Association.

Pres., Geo. W. Mowbray, Tulsa.
1st V.-P., J. G. Smith, Canadian.
2d V.-P., Fred Parkinson, Wagoner.
Treas., Sam R. Frazee, Vinita.

Iowa Retail Hardware Dealers' Association.

Pres., W. A. McIntire, Ottumwa.
V.-P., E. G. Penrose, Tama.
Sec., W. H. Keating, Ottumwa.
Treas., Geo. Lister, Manchester.
Ex. Com., A. C. Heyman, Miles; L. Lindenberg, Dubuque; F. S. Narum, Waukon; E. G. Penrose, Tama; W. A. McIntire, Ottumwa; L. H. Kurtz, Des Moines; H. A. Cole, Council Bluffs; Harry Vincent, Ft. Dodge; W. H. Miller, Cherokee; M. W. Keating, Afton; Jacob Seither, Keokuk.

Kansas Hardware Dealers' Ass'n.

Pres., Geo. F. Andersen, St. Marys.
V.-P., Oscar Roehr, Topeka.
Sec., J. A. Cole, Topeka.
Ex. Com., James H. Hamilton, Arkansas City; E. I. King, Logan; T. H. Kiniry, Beloit; J. M. Walters, Robinson; F. W. Bartlett, Kansas City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., Geo. Dehler, Louisville
1st V.-P., J. S. Ogden, Ashland.
2nd V.-P., Chas. D. Winn, Paris.
Sec., Paul Wagner, Louisville.
Asst. Sec., Wm. Dehler, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres., H. C. Minnie, Eaton Rapids.
V.-P., Geo. W. Bruske, Saginaw.
Sec'y-Treas., H. C. Weber, Detroit
Assistant Sec., C. A. Day, Detroit.
Ex. Com., Samuel Winchester, Jackson; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marion City; James J. Potter, Alpena; Jno. W. Jochin, Ishpeming; Robt. G. Chandler, Coldwater; John Popp, Saginaw, F. S. Carlton, Calumet.

Minnesota Retail Hardware Ass'n.

Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Sec., T. McCracken, Minneapolis.
Treas., G. M. Evanson, St. Peter.
Ex. Com., F. H Hunt, Red Lake Falls; B. F. Kernkamp, St. Paul; Julius Schmidt, Wabasha; W. H. Tomlinson, LeSueur; A. C. Hatch, Battle Lake; Jos. Mason, St. Peter; Chas. F. Ladner, St. Cloud; S. R. Nelson, Owatonna; E. H. Loyhed, Far bault.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., B. F. Naylor, Marshall.
V.-P., Geo. R. Plowman, St. Louis.
Sec., F. N. Neuderff, St. Joseph.
Ex. Com., R. L. Hixon, Hannibal; F. A. Kannsteiner, St. Louis; J. W. Poland, Carrollton; W. A. Wengert, Kansas City.

National Hardware Association.

Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley Philadelphia.
Ex. Com., W. K. Belknap, Louisville; Samuel A. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

National Retail Hardware Dealers' Association.

Pres., W P. Lewis, New Albany, Ind.
V.-P., Geo. Hubbard, Flint, Mich.
Sec., M. L. Corey, Argos, Ind.
Treas., H. T. Helgeson, Milton, N. D.
Ex. Com. Z. T. Miller, Bloomington, Ill.; Fred Neudorff, St. Joseph, Mo.; I. A. Sibley, South Bend, Ind.; H. A. Cole, Council Bluffs, Ia.; H. G. Cormick, Centralia, Ill.

North Dakota Retail Hardware Dealers' Association.

Pres., H. T. Helgesen, Milton.
V.-P., H. N. Joy, Hamilton.
Treas., W. H. Pinkerton, Lakota.
Sec., C. N. Barnes, Grand Forks.
Ex. Com., H. Harrington, Fargo; W. W. Jamieson, Wahpeton; H. F. Strehlow, Casselton; I. L. Newgard, Grafton; H. B. Allen, Jamestown; H. A. Mae, Church's Ferry.

Ohio Hardware Association.

Pres., O. M. Scott, Marysville.
V.-P., W. P. Bogardus, Mt. Vernon.
Cor. Sec., Geo. Gray, Coshocton.
Fin. Sec., Will C. Jones, Columbus.
Treas., H. G. Woodward, Sidney.
Ex. Com., Geo. B. Meyer, Cincinnati; Geo. V. Guyton, Ada; H. F. Rahe, Cleveland; J. Rohrbacher, Akron; A. H. Strome, Warsaw; Frank Winters, Lancaster; James B. Carson, Hamilton; J. W. Brown, Washington Court House.

Pennsylvania Retail Hdw. Ass'n

Pres., Geo. L. Moore, Brownsville
V.-P., Geo. J. Rudolph, Pittsburg.
Sec'y, J. F. Frye, Charlerol.
Treas., B. A. Maggine Braddock.
Ex. Com., A. L. Casselbury, Pittsburg; E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

Philadelphia Hardware Ass'n.

Pres., Julius M. Aff.
V.-P., C. F. Geissler.
Sec., T. B. Hendricksen.
Treas., Edward H. Shannon.
Trustees, Frank Schmidt, Aaron I. Sanson, Jr., Lewis C. Glading.

St. Louis Stove Dealers' Ass'n.

Pres., F. A. Kansteiner.
1st V.-P., Aug. Steinmeyer.
2d V.-P., Aug Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Ass'n.

Pres., J. D. Moore, Birmingham.
1st V-P., F. A Heitman, Houston.
2d V.-P., Bruce Keener, Knoxville.
Sec., C. B. Carter, Knoxville, Tenn.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, N. C.; B. F. Eshleman, New Orleans.

Texas Hardware Jobbers' Ass'n.

Pres., F. A. Heitman, Houston.
1st V.-P., J. C. Bering, Houston.
2d V.-P., Ed. Strauss, Waco
Sec.-Treas., Robert Eikel, Houston
Ex. Com., Jas. Moroney, Dallas; R. F. Bell, Weatherford; W. L. Sanford, Sherman; A. E. Goeth, Austin.

Wisconsin Hdw Dealers' Ass'n.

Pres., John Hessel, Antigo.
V.-P., Otto Schlafer, Appleton.
Sec., C. A. Peck, Berlin.
Treas., George Leverenz, New Holstein.
Ex. Com., Henry Droegkamp, Milwaukee; Arthur Heins, Tigerton; E. H. Ramm, New London; J. Wilkie, Fond du Lac.

L. G. Holloway is a new Fremont, Neb., hardware dealer.

Clarence Cose will start a hardware store in Deloit, Iowa.

Gray & Bennett are a new hardware firm at Flandreau, S. D.

F. J. Wismer has succeeded J. A. McDonald in the hardware line at Britton, S. D.

J. W. Lovely has sold his hardware stock at Howard City, Mich., to J. G. Buck.

The Minshall Hardware Co., Logan, Iowa, have made some important improvements.

The Raymond Cutlery Co., are a new Muncie, Ind., concern, capitalized at $10,000.

N. M. Nelson has sold out his hardware store at Plainview, Neb., to Brown and Sorenson.

The Bewley Hardware Co., Chester, S. C., will shortly increase their capital stock to $25,000.

The Shearsmith Hardware Co. succeed to the hardware business of John Shearsmith, Brown City, Mich.

E. Sprinkle has purchased the interest of W. S. Gouldin in the Creston Hardware Co., Creston, Iowa.

The Wyoming Cutlery Co., Wilkesbarre, Pa., have increased their capital stock from $50,000 to $75,000.

The hardware firm of Fuchs & Krenzien, Stanton, Neb., was dissolved Jan. 1st. Mr. Krenzien purchased Mr. Fuchs' interest.

Mr. Osheim succeeds Jerde & Osheim in the hardware business at Thompson, Iowa, having purchased his partner's half interest.

Traveling hardware salesmen in the West Indies state that there is a steadily increasing business in all the islands except Cuba.

August Swanson, of the Wall Lake, Iowa, hardware firm of Johnson & Swanson, was married recently to Miss Emma Lindberg of that place.

Empfield Bros., hardware dealers at Anselmo, Neb., have dissolved partnership, L. S. Empfield retiring and B. C. Empfield continuing the business.

The Barbour Hardware Co., East St. Louis, Ill., dealers in stoves, hardware, furnaces and bicycles, have increased their capital stock to $20,000.

G. S. Rogers has purchased an interest in the hardware firm of Harris & Rogers, Newmarket, Iowa, and its style will be Harris & Rogers Bro. in the future.

Guy R. Brown, for over 50 years a Williamsburg, N. Y., hardware dealer, died on January 9th, from pneumonia, at his residence, 768 Hancock street, Brooklyn.

T. S. Morton is president; A. S. Morton is vice president, and J. B. Morton is secretary and treasurer, of the Morton Hardware Co., Birmingham, Ala., capitalized at $5,000.

Wire nail manufacturers outside the American Steel & Wire Co. held a meeting at the Lincoln Hotel,

Pittsburg, on Jan. 14, and endeavored to form a pool to govern output prices.

The Martins Ferry, Ohio, Board of Health are in the market for a garbage crematory. Manufacturers are requested to mail catalogues and quote prices to Dr. J. G. Parr, that city.

Robert Brooke, Harry E. Bell, Louis Krause and Vivian F. Gable are the incorporators of the Euclid Mfg. Co., Palmyra, N. J., capitalized at $25,000, for manufacturing refrigerators.

F. H. Danner, J. J. Danner and Carl Gerstenmaier are the incorporators of the Twin City Fence & Wire Works, St. Paul, capitalized at $25,000. This is an old and well known concern.

Herbert M. Justice, Jos. M. Smith and John H. Kreh are the incorporators of the H. M. Justice Co., Baltimore, Md., capitalized at $5,000, for the manufacture of cutlery and silver plated ware.

The Edwards & Bradford Lumber Co., Homer, Neb., have purchased the Miller & Winch stock of hardware, and will take possession of the same February 1st. A new building will be erected.

The Kitselman Bros.' wire fence works, Muncie, Ind., have started their wire mill plant, whose product they will use largely in their fence factory, although some ungalvanized wire will be marketed.

G. B. Caldwell, Logan, Iowa, has sold his hardware store and building to the Logan Hardware Co., which have already taken possession. The new company will make many improvements both to the stock and building.

Geo. F. Anderson, president of the Anderson Hardware & Furniture Co., St. Mary's, Kan., who is also president of the Kansas Retail Hardware Dealers' Association, is at present suffering from a severe paralytic stroke.

Orian C. Cullen, E. D. Cullen, E. W. Anderson, West Steever and others are among the incorporators of the Ball-Bearing Rifle Co., Washington, D. C., capitalized at $500,000, for the manufacture of munitions of war.

Chas. Falb and E. I. Stanhope have purchased the hardware stock formerly owned by Wade & St. John, Ceylon, Minn. This firm would be pleased to receive descriptive catalogues and price lists from jobbers and manufacturers.

The hardware firm of French & Hansen, Harlan, Iowa, have incorporated as the French-Hansen-Whittle Hardware Co., capitalized at $10,000. J. W. French is president; Hans Hansen is secretary, and A. P. Whittle is treasurer.

The Sperry Hardware Co., Kalamazoo, Mich., have been incorporated with a capital stock of $20,000. Chas. D. Fuller is president of the company; Geo. Sperry is secretary and general manager, and M. C. Sperry is treasurer.

The Joseph Dixon Crucible Co., Jersey City, N. J., send us some of their uniquely original calendar blotters for January. These give rear views of a lad standing on a crucible, and a lassie on a barrel of Dixon Silica-graphite paint.

Kimball Bros., Council Bluffs, Ia., are manufacturers of a complete line of improved quick and easy-rising steam and hand power elevators. They would be pleased to correspond with dealers desiring anything in this line.

The Old Dominion Iron & Nail Works Co., Richmond, Va., are manufacturers of a line of special machine bolts, blank bolts, bolt ends, square and hexagon nuts, drift bolts, round or square, harrow teeth, lag screws and special wrought iron work for bridges and buildings.

The officers of the Ranney Refrigerator Co., 103 Lake street, Chicago, were visited by some bad tempered burglars the past week, who climbed a fire escape and made efforts to break open the strong iron doors of their safe. Frustrated in their efforts, the burglars vented their spleen by tearing up papers and wrecking furniture.

The Bindley Hardware Co., Pittsburg, Pa., send us a very artistic 1902 calendar. This shows a picture of a rustic beauty who wears a coquettish straw hat and coyly holds a wisp of hay in her mouth. The trade should write this firm for one of these calendars. When writing them, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Samson Cordage Works, Boston, Mass., send us a small size and unique calendar for 1902, which also gives considerable information concerning the Samson spot cord, whose colored spot is this firm's trade mark, used only on their extra quality cord. One of these little calendars will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Clinton Wire Cloth Co., Clinton, Mass., send us a circular calling attention to their "Clinton Specialties" in window screen wire cloth. They make every description of wire cloth, netting, fencing and perforated metals. Their "Clinton" brand includes painted figured and landscape screen cloth, twist warp and stiffened wire lath, galvanized wire poultry netting, galvanized woven wire fencing, galvanized electrically-welded wire fencing, wire mats, clothes lines, etc.

The Keystone Steel Matting Co., 524 Fourth avenue, Pittsburgh, Pa., send us a very attractive little booklet entitled "From the Dealer's Viewpoint." This matting is made of galvanized flat steel bands, 1-16 of an inch thick by 3/8 of an inch deep, hinged together with galvanized steel rods. The dealer who keeps this matting in stock by the roll is enabled to cut mats into the various sizes required by his customers, without sending to the factory for special dimensions.

The Clark Novelty Co., Rochester, N. Y., who are large manufacturers of milk can and cream separator faucets have recently secured orders for several thousand dozens of the different styles of their brass faucets.

This company also are the manufacturers of the celebrated Clark kerosene oil heating system, which is

used for heating soldering irons, capping steels and for various other purposes where systems for this purpose are operated in canning factories of all descriptions, tinware manufacturing establishments, etc.

A very handsome souvenir is that issued by the H. S. Bettes Hardware Co., Paris, Texas, a wholesale and retail concern. The firm have the exclusive agencies for such firms as the Gurney Refrigerator Co., Cribben & Sexton Co., E. C. Atkins & Co., Inc., Henry Disston & Sons, and Geneva Tool Co.

This booklet gives a sketch of this business, which started in 1875, and has expanded until now it has a floor space of over 70,000 square feet. This firm's traveling men cover all of northeast Texas, and part of the Indian Territory, Arkansas and Louisiana. This book shows handsome half-tones of the various employes of this house, and a series of interior views which show that this firm have a large and well assorted stock.

Henry M. Gay, who has been calling on the hardware trade in Wisconsin for 35 years, is no longer interested in the accommodations of freshwater hotels or the time tables of way freights, as he has left the road to accept an inside position with the William Frankfurth Hardware Co., for whom he has been traveling the last four years. Prior to this Mr. Gay was the Badger representative of such firms as K. & A. G. Sexton, the Biddle Hardware Co., Philadelphia; Woodrough & Hanchett Co., Chicago, and Simmons Hardware Co., St. Louis. Mr. Gay is the compiler of a scrap book containing curious reminiscences of hardware men in the shape of eccentric orders, etc. His many friends in Wisconsin hardware circles will miss his cheery visits.

The Adams & Elting Co., Chicago, issue a very attractive illustrated catalogue of their wood finishers' supplies and paint specialties. This firm have adopted the word "Adelite" as their trade mark. Their Adelite tinted enamels are made in 18 late tints, also black and white. They can be applied to any surface such as walls, ceilings, furniture, picture frames, tables, willowware, bedsteads, toys, radiators, stone fronts, benches and lawn chairs, stone, iron and all interior finishing of houses.

Their Lythite cold water paint is designed for outside use on wood, stone and brick surfaces.

Steel wool and steel shavings are substitutes for sandpaper. They cut more quickly and uniformly better than sandpaper, and do not gum up.

Silaxer is a hard drying surfacer, and is used for all close grained woods and in place of shellac over paste filler on hardwood.

One of these pretty catalogues will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Peters Cartridge Co., Cincinnati, Ohio, have heretofore loaded their popular shot gun shells exclusively with King's powder, smokeless, semi-smokeless and black. For some time past this company has been experimenting with a view of adapting their smokeless powder shells to the various makes of smokeless powder on the market. It now announces that, after exhaustive tests, it is ready to supply Peters' Ideal and New Victor Shells loaded with either King's, Du Pont's, Hazard's, E. C. or Schultze's smokeless powders. These loads are now on the market, so the sportsman having a liking for Peters' shells, but preferring some one of the above named powders, can secure the load he wishes. In addition to adapting these shells to the foregoing powders, all of which are bulk for bulk type, The Peters Co., we understand, are perfecting a high base shell, which is nearly ready for the market, and which will be suitable for the various types of dense smokeless powder. It is the aim of this company to complete its line of shotgun shells suitable for all makes of smokeless powders of both bulk and dense type.

THE DATE IS CHANGED.

On Dec. 7, 1901, F. N. Neudorff, secretary of the Missouri Retail Stove & Hardware Association, wrote us, stating that that association would hold their next annual meeting in St. Louis, Jan. 21 and 22, the hotel at which the convention would be held not having as yet been selected. This time for holding the meeting of the association has evidently been reconsidered, as B. F. Naylor, president of the association, advises us in a letter dated Jan. 13, that this association will hold its annual meeting in St. Louis, Feb. 18 and 19, 1902, the headquarters being the Lindell Hotel. President Naylor further advises us that every hardware dealer in the state is cordially invited to attend, and that special railroad rates will be announced later on.

PROGRAM FOR IOWA RETAIL HARDWARE DEALERS' ASSOCIATION CONVENTION.

The Iowa Retail Hardware Dealers' Association will hold their next annual convention at Des Moines, Feb. 18, 19 and 20, and the executive committee of this prosperous association have arranged the following interesting program for this forthcoming convention:

PROGRAM.

TUESDAY, FEBRUARY 18.

2:30 p. m.—Organization.
Report of Secretary.
Report of Treasurer.
Appointment of Committees.
7:30 p. m.—Meeting of the Executive Committee in Parlors of Savery Hotel.

WEDNESDAY, FEBRUARY 19.

9:00 a. m.—Enrolling New Members.
President's Address
Papers: "Benefits of Organization," H. A. Cole, Council Bluffs; C. R. Keating, Mt. Ayr.
Discussion.
Adjournment.
2:00 p. m.—Paper: "Credits," S. R. Miles, Mason City.
Discussion.
Paper: "The Relation of Jobber and Retail Dealer," C. F. Schmidt, Marshalltown
Discussion.
Adjournment.
7:30 p. m.—General Discussion of Topics Suggested by Members of the Association.

THURSDAY, FEBRUARY 20.

9:00 a. m.—Paper: "Trusts in Their Relation to the Retail Dealer," Geo. Staehle, Earlville.

Discussion.
Paper: "Our Competitors," L. Lindenberg, Dubuque.
Discussion.
Adjournment.
2:00 p. m.—Election of Officers.
Question Box.
Adjournment.

PROGRAM FOR MEETING WISCONSIN RETAIL HARDWARE DEALERS' ASSOCIATION.

The Wisconsin Retail Hardware Dealers' Association have just sent out the program for their forthcoming annual convention, and a glance will show that some interesting topics will be discussed.

WEDNESDAY, FEBRUARY 6.

11:00 a. m. Meeting of the Executive Committee.
1:30 p. m. Payment of Dues.
2:00 p. m. Roll Call.
Reading of Minutes.
President's Address.
Announcement of Committees on Transportation, Resolutions, Grievances, Reception, Legislation, Auditing and Question Box.
Annual Report of Secretary.
Annual Report of Treasurer.
Paper: "How to Build Up a Good Retail Business." Fred Kusel, Watertown.
Election of Officers by Ballot.
Announcement of Question Box.
Report of Committee on National Union. Schlaffer and Nash.
Adjournment.
Good Time. No Business.
8:30 a. m. Payment of Dues.
9:00 a. m. Report of Special Committee on Constitution.
Question Box.
Paper. Scofield, Sturgeon Bay.
Reception and Remarks by Visitors.
Paper by Merbach, Ripon: "Some of the Evils of the Trade."
Reports of Committees.
Question Box.
Adjournment.
2:00 p. m. Discussion of Report of Committee on Constitution.
Paper: H. L. McNamara, "Relation of Traveling Men to Retailers."
Paper: O. P. Schlaffer, "Benefits of National Union."
Discussion.
Unfinished Business.
Adjournment.

MEETING EXECUTIVE COMMITTEE MICHIGAN HARDWARE ASSOCIATION.

A meeting of the Executive Committee of the Michigan Retail Hardware Dealers' Association was held at the Hotel Cadillac, Detroit, Monday, January 13th, pursuant to the call of the president.

The following members were present: President H. C. Minnie, James J. Potter of Alpena, John Popp of Saginaw, C. E. Pipp of Otsego, A. J. Scott of Marine City, A. Harshaw of Delray, Treasurer H. C. Weber of Detroit and Secretary Fred H. Cozzens of New York City. R. R. Chandler of Coldwater arrived too late to participate in the deliberations of the meeting.

After an informal discussion as to the place of holding the next meeting it was unanimously decided to hold it in Detroit, August 13th and 14th, at the Hotel Cadillac.

Various plans for increasing the membership were discussed and it was finally, on motion of H. C. Webber, decided to make a general offer of $1.00 cash for each new member obtained to vote on the following special prizes for those obtaining the largest list.

1st. A prize of $25.00, open to all who turned in 12 or more new members, to be awarded to the one securing the highest number. Contestants for the $25.00 prize are barred from participating in either the $15.00 or $10.00 prizes.

2nd. A prize of $15.00, open to all who secure 8 or more new members, to be awarded to the one securing the highest number. Contestants for the $15.00 prize are not allowed to participate in the $10.00 prize.

3rd. A prize of $10.00, open to all who secure 5 or more new members, to be awarded to the one securing the highest number.

On motion, the president was instructed to appoint a committee who should have in charge the program for the August convention and who should act in conjunction with the president and the assistant secretary. President Minnie appointed Messrs. Webber, Popp and Scott as members of that committee.

On motion the secretary was instructed to send to all members a list of the proceedings of this meeting with that section of the By-laws relating to membership, in which he was to call especial attention to the prizes and awards for securing new members. He was also instructed to send a letter to the various hardware traveling men in Michigan, calling their attention to these awards and urging them to coöperate in securing new members.

Secretary Fred H. Cozzens, being now engaged in the wholesale hardware business in New York, he stated that he could not equitably longer maintain his relations with the organization, and he therefore tendered his resignation to take immediate effect, which was accepted after a resolution of thanks and appreciation had been unanimously passed. A further resolution, voting the sum of $100.00 in further recognition of his services in behalf of the retail hardware trade was also unanimously passed.

A resolution was also unanimously passed, stating that it was the sense of the meeting that the sales of builders' hardware to the consumer by the jobbers of Michigan were becoming altogether too frequent and expressing it as the unanimous sense of the meeting that wherever such sales are made by jobber, a proper commission on credit shall be given a retail dealer who does business within the normal selling district where the sale takes place. The secretary was requested to send a copy of these resolutions to all jobbers in Michigan, and to request their coöperation in having it enforced.

H. C. Weber was then elected secretary to fill the unexpired term occurred by the resignation of Secretary Cozzens, with authority to appoint an assistant secretary, which he at once did, appointing Clarence A. Day, Assistant Treasurer of the Trade Journal Association, in such capacity.

Meeting then adjourned.

NEW SAW CATALOGUE.

E. C. Atkins & Co., Inc., Indianapolis, Ind., favor us with their handsome saw catalogue, hardware edition, 1902. A glance over this volume shows that a number of changes have been made in their line since last year, including the following additions: Metal milling saws, not hollow ground; metal milling saws for Bryant & Highey machines; lathe saws; inserted tooth circular saw, No. 4 short holder pattern; inserted tooth circular saw, No. 3 short holder pattern; double edge band saws; narrow band saws, with beveled backs; "Hemlock King" cross-cut saws; "Mohawk" cross-cut saws; narrow "Victor" cross-cut saws; "Cedar King" one-man saws; "Tyee" cross-cut saws; "Star of the West" cross-cut saws; "Howatson" cross-cut saws; Auckland tabs for cross-cut saws; common ears for cross-cut saws; No. 12 cross-cut saw handles; "Tubular" wood saws; No. 1900 wood saws; wood saw blades, Nos. 32, 33, 34; hand saws, Nos. 68, 69 and 70; butcher saws, in coils; trowels, for edging cement walks; beef topping knives, and the Queen vegetable slicer.

This book contains a variety of technical data, such as a table of speed of circular saws, rules for calculating the speed of saws, pulleys or drums, standard price list of emery and corundum wheels, standard price list of leather and rubber belting, price list of files and rasps adopted by the File Manufacturers' Association of the United States. Among the specialties outside the line of saws, is the Queen vegetable slicer. This slicer has a double edged knife cutting both ways. The knife can be removed when dull and sharpened, and is very easily adjusted to cut thick or thin slices.

Their beet topping knives are silver-steel and are made with a straight blade and a curved blade.

The improved Criterion saw set has a pointed die adapting it to any size of tooth. This saw set is made of the best refined malleable iron, lacquered a rich brown. The die and anvil are drop-forged from the finest tool steel and properly hardened. One of these catalogues will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

CHICAGO HARDWARE BOWLING LEAGUE.

The past week has shown a wider breach between the leaders and the tail-enders in the Chicago Hardware Bowling League. The Hibbard-Spencer-Bartlett Co.'s team has been resting on its oars, while the Vaughn & Bushnell Mfg. Co. aggregation of rising young men have swelled their percentage column materially by adding 3 to their won column, as has also the Geo. B. Carpenter & Co. team. The Orr & Lockett Hardware Co. are stationary, remaining within striking distance of the half-and-half mark. The second division scores look as though a gentle cyclone had been getting its work in. The H. Channon Co. and C. Sidney Shepard & Co. teams have been drifting backwards. Crerar, Adams & Co. are still sitting down in the rear, although they have moved up three rows since last chronicled. The W. D. Allen Mfg. Co. have only lost six games the past week, which, considering the fact that they have not won any, has had a bearish effect on their percentage. The scores up to date are as follows:

	Won.	Lost.	Per cent.
Hibbard, Spencer, Bartlett & Co.	30	6	833
Vaughn & Bushnell Mfg. Co.	27	9	750
Geo. B. Carpenter & Co.	28	11	718
Orr & Lockett Hardware Co.	16	17	485
C. Sidney Shepard & Co.	14	22	389
H. Channon Co.	14	25	359
Crerar, Adams & Co.	11	25	306
W. D. Allen Mfg. Co.	7	32	179

ST. PAUL HARDWARE DEALERS' ASSOCIATION.

When the Minnesota Retail Hardware Dealers' Association hold their next annual convention at St. Paul they will have at hand a practical essay on "Local Organization" in the St. Paul Retail Hardware Dealers' and Sheet Metal Workers' Association. The officers of this effective organization are as follows:

President, J. F. McGuire, of St. Paul Hardware Company.

Vice President, Wm. Rhodes, Scribner Libby Co.

Treasurer, Mathews Schmitz.

Secretary, Benj. F. Kernkamp, of Notting & Kernkamp.

Directors: C. E. Battles, J. F. McGuire, A. Marzolf, L. S. Breher.

AMERICAN HARDWARE ABROAD.

Several of the largest New York hardware manufacturing firms report satisfactory increases within the past few months in orders from their agents in Australia, India and Japan. For some time American goods have been received in the British colonies on an equality with English-made goods, so far as sentimental considerations are concerned, and now the extent to which American goods can occupy colonial markets seems to be measured only by the willingness of their makers to adapt them to the requirements of the new trade. The ability of American houses to compete successfully with English and German firms in prices seems to have stood the test of practical trial beyond doubt.

Among the lines of American manufacture in which Australian buyers have lately become especially interested are bolts and edge tools. Enormous quantities of American bolts are now being used in Australia. Hatchets, cleavers, and other varieties of edge tools are having a remarkable sale in that part of the world just now, as a result of the effort of American manufacturers to meet the demands of Australian buyers down to the last details. The unwillingness of American manufacturers to conform to requirements that often seemed to them unreasonable or capricious has long interfered with the extension of their trade in foreign countries, and it is only recently that they have been willing to consult the demands of foreign trade to the extent of making new patterns, dies, etc.

In South America American hardware has been at a disadvantage in the competition with English and German goods because of being sized in inches instead of according to the metric scale. In order to secure any business at all American firms were obliged to manufacture and carry special lines of goods adapted to the foreign scale of measurement. New York firms who have done this say it involves a very considerable outlay far in excess of the returns, but they are now satisfied with the results of the investment, and are confident of continually increasing returns in the future.—New York Commercial.

KANSAS DEALERS MEET.

The Kansas Retail Hardware Dealers' Association held in Kansas City, Kansas, January 16th; meeting to the following call, sent out by J. A. Cole, secretary, under cover of January 8th:

"The annual meeting of the Kansas branch of the National Retail Hardware Dealers' Association will be hed in Kansas City, Kansas, January 16th; meeting will be called to order at 10 a. m., in the room of the Mercantile Club. Owing to the illness of our President, the Executive Committee have decided not to have any regular program, but as matters of importance will be considered, we will be pleased to have your attendance."

Joseph W. Hall, Whitewater, Wis., writes us in a recent favor: "Your January 4 issue is one of most condensed papers I ever read. It alone is well worth the price of the year's subscription."

BUSINESS CHANGES.

NEW FIRMS.

Myrtle, Minn.—Frank Dunn.
Preston, Minn.—Oliver Bros.
Skyberg, Minn.—Mr. Shigley.
Edgerton, Minn.—Geo. Stedman.
Cleveland, Minn.—Loyis Vollmer.
Milaca, Minn.—Mallette & Cramb.
Butte, Mont.—H. L. Blume & Co.
Clarksville, Tenn.—Clarksville Hardware Co.
Columbia, Miss.—The Hill Hardware Co.
Conway Springs, Kan.—Grant Lane.
Darby, Pa.—Harry Sipler.
East St. Louis, Ill.—Gutwald-Wallace Hardware Co.
Hinton, W. Va.—Hinton Hardware Co.
Milwaukee, Wis.—The Smith-Russell Co.
Minden, Neb.—The Haws Hardware Co.
Morgantown, W. Va.—Pickenbaugh & Kerns.
Mt. Vernon, Ind.—E. B. Schenk Hardware Co.
New York, N. Y.—The Miller, Sears & Walling Co.
Nicholville, N. Y.—Hiram Blanchard.
Platteville, Wis.—The Oettiker Hardware Co.
Pueblo, Col.—Phillips-Cooke Hardware Co.
Summitville, Ind.—Summitville Hardware Co.
Wardner, Idaho.—The Wardner Hardware Co.
Woonsocket, R. I.—The Sylvester & Brodeur Co.
Zanesville, O.—The Young Hardware Co.

CHANGES.

Adams, N. Y.—Mr. Percy Parlow, of Gouverneur, has purchased the stock of R. D. Guthrie.

Anthon, Ia.—C. C. Bradley & Co. are succeeded by John Reinhart, of Oto, and George Servage, of Piero.

Britton, S. D.—F. J. Wismer succeeds J. A. MacDonald.

Camden, N. Y.—Frank H. Dorrance, of W. H. Dorrance & Son, has purchased another fourth interest in the business, which makes him the owner of three-fourths of the establishment.

Caro, Mich.—Purdy Bros. & Co. succeed Lazelle Bros.

Charles City, Ia.—Chas. and Ed. Snyder succeed H. V. Fussell & Co.

Columbus Grove, Ohio.—A. C. Hauck, of Hauck & Morris, has sold his interest to Elias Williams.

Columbus, O.—The Smi h Bros. Hardware Co. has increased its capital stock from $100,000 to $150,000.

Defiance, O.—There has been a change made in the hardware store of W. A. Kehhast. Abe Smith and Henry Roehrs have been admitted as partners, each taking a half interest in the business.

Delaware, O.—S. T. Daugherty and his nephew are contemplating the purchase of the stock of J. P. Wintermute.

Ferris, Ill.—The hardware and agricultural business of the Simpson Hardware Co. has been purchased by W. H. Paris.

Norwich, N. Y.—Burchard Bros., of Oxford, succeed Daniel P. Holmes.

Preston, Minn.—Oliver Bros. succeed George C. Pright.

Okabena, Minn.—F. C. Ahrens & Co. have succeeded Mary Wey.

Preston, Minn.—Oliver Bros. succee dGeorge C. Pright.

Cherry Grove, Minn.—Mr. John Hingeveld is succeeded by Henry Wesselink.

Holland, Minn.—Feldman & Liebring are the successors of M. T. Mahoney.

Lakefield, Minn.—E. W. Zarlin is succeeded by John and August Milbrath.

Alpha, Minn.—John Waswa has been succeeded by Aug. Groth & Co.

Mabel, Minn.—Christopherson & Nelson have succeeded Gilmore Bros.

Fisher, Minn.—Ole Larson & Son are the successors of Larson Bros.

Granite Falls, Minn.—Johnson & Lapman have sold their interest in the Granite Falls Hardware Co.

Devils Lake, N. D.—C. P. Brainerd succeeds C. P. Brainerd & Co.

Canastota, S. D.—Scott & Uecker succeed W. S. Scott.

Northfield, S. D.—Webb & Drisco are succeeded by Drisco & Smith.

Colman, S. D.—Lee Bros. succeed Simonson & Nelson.

Bloomington, Wis.—Geo. Humphrey succeeds F. H. Fisher.

Berlin, Wis.—The C. A. Peck Hardware Co. has been incorporated with a capital stock of $15,000.

STOPPAGES.

Wood Lake, Minn.—Collin McNicol.
Iona, Minn.—Smith & Lentz.
Garey, Minn.—Pladsen & Milsten.

Ceylon, Minn.—It is reported that Wade & St. John have sold out.

Atwater, Minn.—Feig & Toensing are closing out their hardware stock.

Ivanhoe, Minn.—A voluntary petition in bankruptcy has been filed by the Pioneer Hardware Co.

Sanborn, N. D.—J. F. Jaberg is negotiating to sell out his stock.

Pleasant Lake, N. D.—Cloutier Hardware Co.
Pleasant Lake, N. D.—Moen & Hermann.
Alexandria, La.—E. M. Murdock.
Cincinnati, O.—John H. Hartke.
Lebanon, Ind.—Price & Goodwin.
Water Valley, Miss.—The Shipman Hardware Co.
Washington, D. C.—Edwin H. Morsell.

MISCELLANEOUS.

Buffalo, N. Y.—K. Bilski, 610 Fillmore avenue, fire; damage, $2,000.

Clearfield, Pa.—J. E. Kirk, fire; partially insured.

Deming, N. M.—W. C. Wallis, fire; loss on stock and building, $25,000; insurance, $3,500.

E. Worcester, N. Y.—Baldwin Hardware Co., fire.

Northampton, Mass.—L. P. & S. W. Woodbury, fire.

Pittsfield, Ill.—Lloyd Hardware Co., fire; fully insured.

Salem, W. Va.—D. Powell, fire; loss, $15,000.

Heating and Ventilating.

T. Shea is president; C. J. Salin is secretary, and Fred Jackson is treasurer, of the Hawkeye Plumbing & Heating Co., Des Moines, Ia., capitalized at $6,000.

John H. Lucas, Mathew A. Foster and Ben C. Taylor are the incorporators of the President Furnace Co., Kansas City, Mo., incorporated with a capital stock of $100,000.

James C. McGregor, James E. Foley, David E. Austin, Alex. M. Kerr, and Hugh Brodie, are the incorporators of the Detroit Separator Co., Detroit, Mich., capitalized at $15,000, for the manufacture of steam and water appliances.

S. E. McLaughlin, of Woodhull, Ill., has accepted a position as manager of the furnace department of P. D. Ray & Son, Arcola, Ill. Mr. Laughlin is an experienced furnace man and a hustler, as is shown by the fact that he closed a furnace contract for the local bank during the first day he was in that city.

One of the handsomest calendars of the year is that sent the trade by the Kelsey Furnace Co., Syracuse, N. Y., makers of the Kelsey warm air generator. On this calendar is a reproduction of A. Asti's beautiful picture entitled "Carnations." This is an oval bust portrait of a beautiful brunette with a wealth of black hair and the blackest of eyes. The trade should certainly write this firm for one of these calendars. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

The L. J. Mueller Furnace Co., Milwaukee, Wis., make a variety of furnaces, among which is the Mueller school and church furnace No. 87, for long wood. This furnace has an extra heavy grate and of such shape as is best adapted for burning wood. It can be removed or replaced through the feed door. Back of the grate and on a level with it, across the bottom of the firebox, are placed heavy cast iron, ribbed plates, which extend to the extreme end of the firebox, making the firing space 88 inches long.

The Kelsey Heating Co., Syracuse, N. Y., send us a handsome memorandum book with celluloid cover. This book gives interesting data concerning the Kelsey warm air generator. The principle of this heater is to warm great volumes of air by bringing them into actual contact with an extensive and properly heated surface. This is accomplished by sending the air in separate channels through corrugated cast iron sections which surround the fire. It is claimed that by division of the air into as many flows as there are sections it is more thoroughly and evenly heated than by simply passing a body of air over, or next to, a hot surface. This book contains a calendar for 1902 and 1903, and is both attractive and useful. The trade, in writing for same, should kindly add: "Saw it in THE AMERICAN ARTISAN."

The American Radiator Co., Lake and Dearborn streets, Chicago, send us a small circular calling attention to their line of Ideal radiator enamels. The tints offered are delicate yet bright, and by mixing one color with another almost any fashionable shade may be secured to harmonize with the draperies, wall paper or other furnishings of artistic homes. Colors regularly carried in stock, in gallon, half-gallon and quart cans, by this firm, are: Alabaster gloss, azure blue gloss, light pink gloss, oak brown gloss, light drab gloss, apple green gloss, gobelin gloss, ebony (flat black), silver gray gloss, blue tint gloss, lilac gloss, cream gloss, terra cotta gloss, nile green gloss, bronze green gloss and sea green gloss. A sample tint card will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

HOT WATER ATTACHMENT FOR FURNACE.

TO THE AMERICAN ARTISAN.

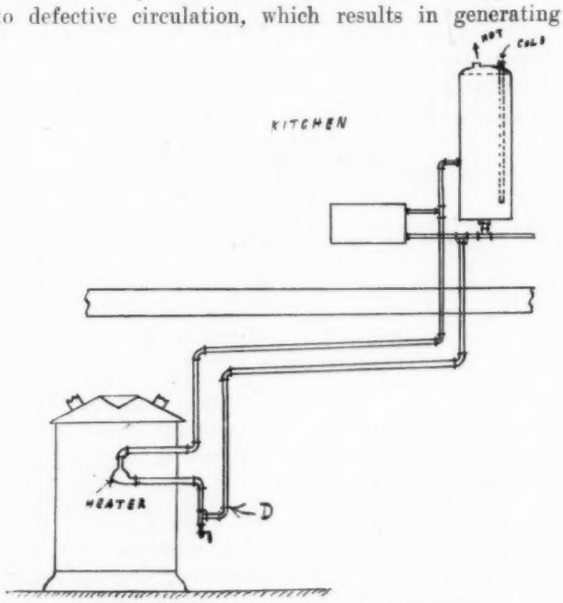
I enclose a rough sketch of a hot water attachment to a furnace connected with a range boiler. We have a similar arrangement with other boilers with same kind of hot water attachments that work all right, but this does not. It thumps and fails to work. There are no traps that we can discover. Could you give us any points so as to remedy the difficulty?

F. M. SMITH.

Fremont, Neb., Dec. 15, 1901.

ANSWER BY JAMES J. LAWLER.

Where a hot water system gives a thumping noise, as described by our subscriber, the cause is always due to defective circulation, which results in generating



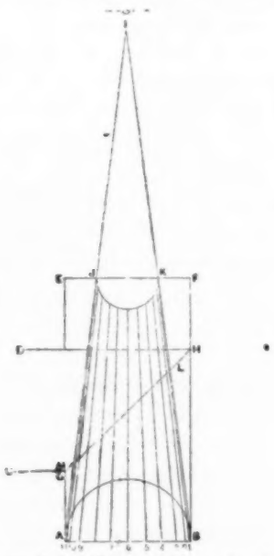
steam in the heater and, by condensing quickly, noise is produced. There may be no traps in the pipes, and still the noise takes place, and again the pipes may be perfectly free and clear and the noise exist. Sometimes such heaters are placed too deep in the fire box, so that they become too hot for the work they have to perform, and the size connections they have between the heater and boiler. It is always a good plan in the pipe work of such hot water attachments to form a pocket or dip, as shown in the accompanying sketch at D, so that the return water will have to rise as it enters the heater. Evidently there must be some obstruction in the pipe connections, which should be carefully examined, and, anyway it would be better to use one-inch pipes in place of three-quarter-inch between heater and boiler, without reducing same at any point.

Tinshop.

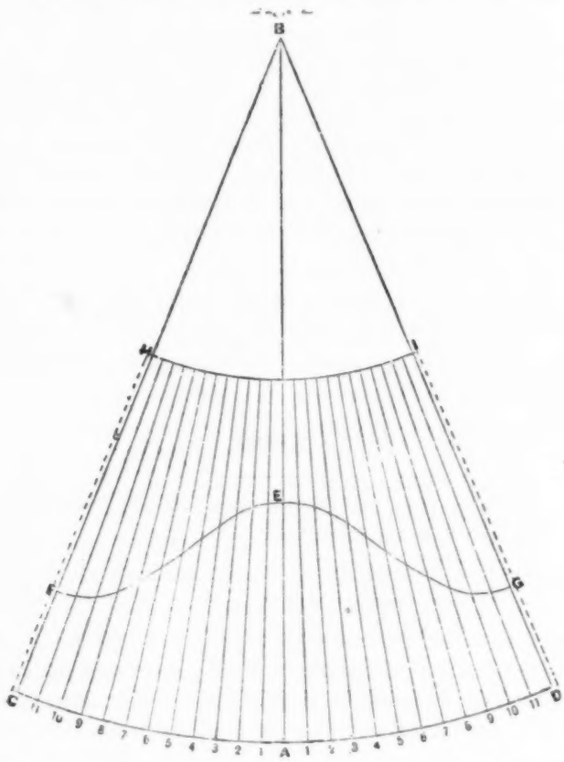
TAPERING ELBOW PATTERN.

TO THE AMERICAN ARTISAN.

The accompanying pattern is the one desired by "G. J." in a recent issue. In the accompanying drawings let *AB* and *CD*, Fig. 1, equal large end of elbow, *DHB* the angle; make *HF* equal *CG* and *EF* equal



AB; make *JK* equal to the small end of the elbow; draw the lines *BK* and *AJ*, continue the lines until they intersect at *I*; describe the semi-circles *AB* and



JK; divide the semi-circles into the same number of equal parts; from the points draw lines as 1, 2, 3, etc.

On any line, as *AB*, Fig. 2, with the radii *IK* and *IB* describe the arcs *HI* and *CD*; set off *CAD* equal in length to the circumference of the large end *AB*; draw the lines *CB* and *DB*; set off on each side of *AB* the same number of equal distances as in the semi-circle *AB*; from the points draw lines cutting the center at *B*; make *AE* equal to *BL*; make *CF* and *DG* equal to *AM*; also each of the lines bearing the same figure as 11, 2, 2, 3, 3, etc., then a line traced through the points will form the pattern.

FITTING UP A SPRINKLING WAGON.

TO THE AMERICAN ARTISAN.

Will some tinners please give me their experience in fitting up a sprinkling wagon? "TEDDY WEST."

Oakley, Idaho, Jan. 12, 1902.

SNAP RULE FOR A T-JOINT PATTERN.

TO THE AMERICAN ARTISAN.

Would like a snap rule for a T-joint pattern?

——, Iowa, Jan. 12, 1902. READER.

TINNERS' SAW HORSE.

TO THE AMERICAN ARTISAN.

Would mention to W. H. P. that I have found it preferable to fasten rolls, folders, etc., to wooden horses, corresponding in shape to a carpenters saw horse. Top or back of these horses to be about 8″ or 10″ wide, or as wide as base of machine, corresponding in length with same. Make legs of 2x6, tapering at bottom, spread same equal to height, use bolts to fasten legs to

back instead of spikes, as nails or spikes will work loose. Nail pieces on inside of legs, as they are more out of the way thus placed.

These horses should be made very solid, to avoid becoming rickety; machines thus arranged are much preferable as they can be brought out into open space when in use, making it very easy to get to them with any kind of work, compared to having them fastened to the bench, not only taking bench room but making it inconvenient to approach with large and odd-shaped work.

By simply looking at sketch one would think it

necessary to have to fasten same to floor (but for the benefit of those who care to try them) will state that I never found it necessary in working anything up to as heavy as No. 18 iron. The best thing about them is that when they are not in use they can be shoved into any old corner or place, and when wanted they can be brought out to the front just where you want them. I have fitted out two shops in which I have worked with these horses and think them just O K.

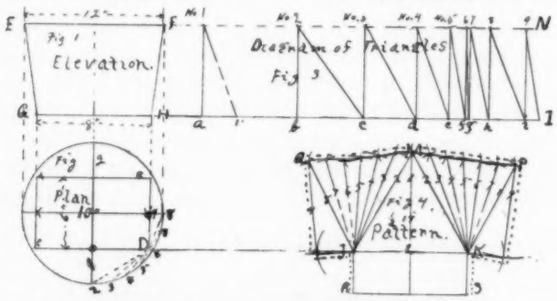
BUNYAN E. ANDERSON.

Dawson, Minn., Jan. 15, 1902.

PATTERN FOR ARTICLE WITH RECTANGULAR BASE AND ROUND TOP.

TO THE AMERICAN ARTISAN.

In response to Mr. J. K. Berry, of Minneapolis, I submit the following method for developing pattern for article with rectangular base and round top. It makes no difference whether the top is larger or smaller than the base, the same principles is employed to obtain a correct pattern. To any one that understands triangulation the drawings are sufficient, but I will endeavor to explain them as clearly as I can. Draw plan and elevation, Fig. 1 and 2. Divide one-quarter of



circle into any number of equal points. In this case, six. Draw lines from these points to corner of rectangle at *D* and number same. Draw horizontal lines *H I* and *F N*, commencing at *A* 1. Set off on line *H I* the distance, with dividers, of *o* 2 in plan, which produces triangle No. 1. Now, with dividers, set from *D* 2 in plan, set off that distance on line *H I* from *b* and produce triangle No. 2. Treat all lines from *D*, in plan, in the same manner till No. 9 is reached. This is obtained the same as No. 1, only take the distance *o* 8, in plan, and set off on line *H I*. To develop the pattern, draw line *J K* the length of longest side of rectangle, in this case 10", and erect perpendicular in center line *L M*. Set dividers from *I I*, triangle No. 1, and lay off point *M* on line *L M*, which is the slant height of article. Draw lines *J* 2 and *K* 2, these lines will be found the same length as the hypotenuse of triangle No. 2. Therefore we have no further use for it. With dividers spaced the length of the hypotenuse of triangle No. 3 and with one leg at *J* and *K*, respectively, describe arcs and number same as triangles are used. Treat remaining triangles in same manner till No. 8 is used. Then, with dividers, set the length of hypotenuse of triangle No. 9 with one leg of dividers at *P*, Fig. 4, describe an arc as shown. Now, with dividers, set half the shortest side of rectangle, or 3" in this case, with one point at *J* and *K* describe arcs, cutting those previously drawn, and draw lines as shown; this completes one-half the pattern. In articles of this sort I add material for joining same to rectangular pipe and double seam the ends. The dotted lines are for laps.

R. J. SLOTHOWER.

Dixon, Ill., Jan. 13, 1902.

NOTES AND QUERIES.

OIL PUMPS.

From McCartney & Co., Weldon, Iowa:

Where can we buy oil pumps?

Ans.—S. F. Bowser, Ft. Wayne, Ind.; Anthony Wayne Mfg. Co., Fort Wayne, Ind.; Blakeslee Mfg. Co., Du Quoin, Ill.; Wm. Powell Co., Cincinnati.

WINDOW VENTILATORS.

From Wm. Eichorn, Clinton, Iowa:

Where can I buy window ventilators?

Ans.—Protective Ventilator Co., 129 Fulton street, New York; Roebuck Co., 172 Fulton street, New York.

REVOLVING FLY FANS.

From Wm. Eichorn, Clinton, Iowa:

Where can I buy revolving fly fans?

Ans.—Bridgeport Brass Co., Bridgeport, Conn.; C. & C. Electric Co., 143 Liberty street, New York.

TINNERS' SQUARES.

From F. W. Hasbrouck, Corning, Iowa:

Where can I buy tinners' squares?

Ans.—Athol Machine Co., Athol, Mass.; L. S. Slarrett Co., Athol, Mass.; Stanley Rule & Level Co., New Britain, Conn.; Peck, Stow & Wilcox Co., Southington, Conn.

ADVERTISING NOVELTIES.

From Hensien Mfg. Co., Detroit, Mich.

Where can we buy advertising novelties?

Ans.—Fanner Mfg. Co., Cleveland, Ohio; F. L. Shafer, Chicago; Hampden Toy Co., Westfield, Mass.; Kaufmann & Strauss Co., New York; National Metal Edge Box Co., Philadelphia; Scranton Button Co., Scranton, Pa.; Somers Bros., Brooklyn, N. Y.; Westcott-Jewell Co., Seneca Falls, N. Y.

GEM FIRE POTS.

From Joseph F. Fillion, North Platte, Neb.

Who makes the Gem fire pot?

Ans.—Burgess Soldering Furnace Co., Columbus, Ohio.

ITEMS.

It is rumored that a new $100,000,000 tin can combine is being organized.

J. E. Byrnes, James Barnes and Geo. C. Schlegel are the incorporators of the Rochester Nonrust Tinware Co., Rochester, N. Y., capitalized at $25,000.

James Wood, Noroton, Conn., sends us a little circular giving some testimonials to his Hurricane chimney top, designed to secure faultless drafts for chimneys.

The Cincinnati Stamping Company are moving into their new building, on West McMicken avenue, that city, where they will be in full running order by February 1.

The Lalance & Grosjean Mfg. Co., Woodhaven, L. I., have purchased land near Hempstead, L. I., where they will erect a branch factory for the manufacture of agate ware.

The Lisk Mfg. Co., Ltd., and the McLaughlin-Martin Parkhurst Co., both located in Canandaigua, N. Y., will shortly consolidate under the style of Lisk Mfg. Co., Ltd.

The Wheeling Roofing & Cornice Co. are erecting a plant in New Martinsville, W. Va., and will engage in the manufacture of roofing supplies, felt roofing, cornices, tinplate, etc.

Edward C. McHenry, S. B. Dance and Sam. W. Groome are the incorporators of the New Jersey Metal Co., Salem, N. J., capitalized at $10,000, to manufacture metal caps for jars.

The McKeesport Mfg. Co. will shortly commence the erection of a new tin plate plant at Port View, Pa., under the supervisory care of Edward Crawford, formerly with the United States Tin Plate Works, Demmler, Pa.

The New Process Mfg. Co., St. Louis, Mo., and Dallas, Texas, make a complete line of roofing goods, including corrugated and V crimped and roll cap steel roofing, the Flatau patent steel roofing, imitation pressed brick siding, etc.

The Niles Iron & Sheet Co., Niles, Ohio, are now making about 1,000 tons of Bessemer sheet steel, gauges 16 to 30, per month. They are now putting a 60-foot addition to their main building of about 60 feet, making their building about 124x350 feet over all.

The Globe Ventilator Co., Troy, N. Y., are manufacturers of the Globe ventilator, in brass, copper, galvanized iron, and with glass tops for skylight purposes, for the ventilation of schools, churches, halls, mills, factories and audience rooms of every character.

According to a press dispatch, D. S. Brookman, manager of the Wellsville, Ohio, plant of the American Sheet Steel Co., has been indicted on the charge of discharging an employe because he belonged to the Amalgamated Association of Iron, Steel and Tin Plate Workers.

Frank Guldener is president; John R. Karle is vice president, and Ernest Sharp is secretary of the Baltimore Stencil & Mfg. Co., Baltimore, Md., who have just erected a two story building, 80x200 feet in dimensions, for the manufacture of galvanized and japanned ware, etc.

The J. M. & L. A. Osborn Co., Cleveland, Ohio, have sent out a notice to their customers to the effect that on and after Feb. 1st no receipts for remittances by check will be sent out by them, except on request. The checks bearing this firm's endorsement are a sufficient receipt, of course.

The Lalance & Grosjean Mfg. Co., of New York, Chicago and Boston, have placed contracts for a complete galvanizing outfit for their factory at Woodhaven, Long Island. The new plant will be used for the manufacture of a full line of galvanized ware, a line that company have not heretofore produced. The new plant will be ready for operation in about six weeks.

J. L. Perkins & Co., 241 Lake street, Chicago, are western agents for the Double Truss Cornice Brake Co., Buffalo, N. Y., manufacturers of the Electric City gutter former. In this former the rolls are rigidly secured to the bed piece of the machine at intervals along their entire length, and the material is bent around the rolls with a mechanical forcing bar, which is also secured to the bed piece at intervals along its entire length. The beading rods which automatically adjust themselves, are of the best steel, with a clean-cut groove, latest pattern, key-seated cranks and polished steel hand grips.

Bruce & Cook, 186-190 Water and 248-250 Pearl streets, New York, who are now in their ninetieth year of existence as dealers in tin plate and metals, send the trade one of their latest calendars, accompanying which is the following prognostication and resume of market conditions:

"In our estimation, the prices which are ruling at the present time, are as low as can be reasonably looked for on all kinds of metals for some time to come. The condition of the steel market would seem to warrant higher prices for this product in the near future. The very large demand for steel product, the inability of the railroad companies to handle promptly the enormous traffic, indicates that the country is still in a very prosperous condition, which appears likely to continue during the present year."

One of these calendars will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

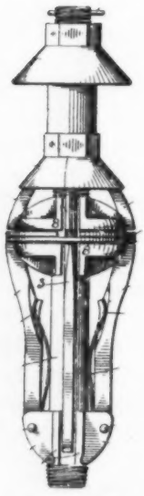
AN ARTISTIC CALENDAR.

The Schill Bros. Co., Crestline, O., send us a very handsome 1902 calendar showing a reproduction in colors of Geo. H. Taggart's painting entitled "The Raffle," which is a masterful study in expression. Three men past middle age with weather-beaten faces and rough coloring are seated at a rough table. One of them has just shaken three dice out of a box and all are watching the result of the hazard with absorbing interest. The reward of victory in the shape of a fat goose hangs on the wall next to the table.

The pose of the hands of the three men is marvelously good. One man shows his absorbing interest by tightly clenching his fist as he rests it on the table. Another man, with quieter but more intense temperament, is pressing his finger tips on the table after the manner of a mesmerist, while the third has his hand on the edge of the table with the thumb underneath same and is evidently pressing downward with the fingers and upwards with the thumb at the same time. This picture is certainly a beautiful study of the nervous strain caused by games of chance. It will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

IT IS said that the principal reason the corporations are so fond of New Jersey laws is not their cheapness so much as their fixed character.

Patents.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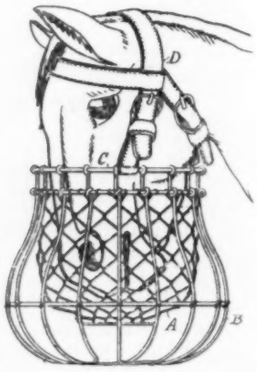
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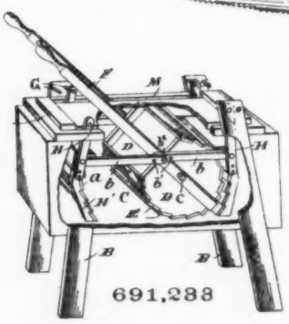
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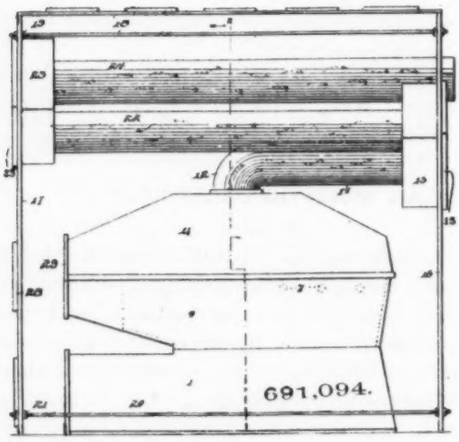
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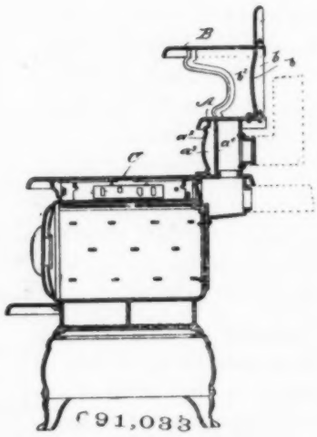
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691,097—Horse Muzzle. Henry Bark, Yonkers, N. Y.

691,093—Milk Can. Charles H. Bagley, Hoboken, N. J.

691,223—Churn Shield. Isaac H. Whitely and John R. Yocom, Hope, Ark.

691,237—Handsaw. Warren C. Buell, Indianapolis, Ind.

691,057—Flue Cleaner. Alfred A. Hull, Knoxville, Tenn.

691,052—Coffee or Tea Pot. Simon J. Freeman, Bradford, Pa.

691,233—Washing Machine. David W. Bovee, Waterloo, Iowa.

691,094—Hot Air Furnace. Harry W. Baker, Oakmount, Pa.

691,033—Cooking Stove or Range. George E. Wilbur, Taunton, Mass.

691,150—Sheet Metal Elbow. Orville H. Lawrence, Waverly, N. Y.

691,036—Combined Dinner Pail and Lantern. William Williams, Teller, Ohio.

IN THE SMOKING CAR.

"Here's a good one," said the man from Denver. "What's the difference between a pen and a pencil? Give it up? A pen has to be driven, but a pencil has to be lead. See?"

"The automatic bell buoy beats 'em both," murmured a quiet little chap who had got on at Cleveland. "It rights itself."—Philadelphia Press.

LONELY OUTLOOK.

"Well," remarked Noah, thoughtfully, as he looked out over the waste water, "it will be pretty lonely when we get ashore."

"Yes," answered Japhet; "there won't be enough of the neighbors left to get up a court of inquiry and prove that we didn't know how to run the ship."—Washington Star.

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Garry Iron and Steel Co..... 41
Gerock Bros. Mfg. Co..... 40
Globe Ventilator Co..... 56
Gobeille Pattern Works..... 43
Great Western Stove Repair Co..... 43
Harley Burglar Proof Ventilating Sash Lock Co..... 49
Harkins & Willis..... 56
Henry & Scheible..... 9
Hoffman, Geo. W..... 44
Illinois Roofing & Supply Co..... 42
Independent Register Co..... 1
Iwan Bros..... 50
Jones, J. H..... 2
Kewanee Boiler Co..... 2
Kimball Bros. Elevator Co..... 55
Kirk, H. N..... 51
La Crosse Steel Roofing & Cor.Co. 40
Lalance & Grosjean Mfg. Co..... 48
Lawrence Mfg. Co..... 55
Lee, Glass Andreesen Hdw Co..... 54
Lennox Machine Co..... 11
Lufkin Rule Co..... 55
McClure & Co..... 56
Merchant & Co..... 41
Merselder, W. L..... 43
Meyer Furnace Co..... 10
Michigan Hardware Mfg. Co..... 41
Miller Catalogue Cabinet Co..... 52
Monarch Stove Co..... 5
Monroe Furnace & Foundry Co. 12
Morrill, Chas..... 47
Mueller, L. J. Furnace Co..... 10
National Enameling & Stamping Co..... 45
National Vapor Stove & Mfg. Co. 6
Nicholson File Co..... 1
North Bros. Mfg. Co..... 52
Old Dominion Iron & Nat. Works 49
Osborn, The J. M. & L. A. Co..... 56
Peck, Hubert..... 38
Pelouze Scale & Mfg. Co..... 47
Perkins, J. L. & Co..... 1-41
Peters Cartridge Co..... 50
Philadelphia Lawn Mower Co..... 51
Philadelphia Hardware & Malleable Iron Works..... 9
Phoenix Iron Works..... 11
Plume & Atwood Mfg. Co..... 2
Powers Bros..... 55
Quincy Stove Works..... 9
Randleman & Sons..... 49
Richmond Stove Co..... 8
Ringen Stove Co..... 3
Rogers, S. L. & G. H..... 54
Samson Cordage Works..... 1
Schreiber & Conchar Mfg. Co..... 11
Schwab, R. & J. Co..... 12
Shipman, Bradt & Co..... 49
Smith, Chas. Co..... 13
Smith & Hemenway Co..... 46-47
Sperry, D. R..... 55
Standard Chain Co..... 51
Standard Lighting Co..... 4
Stanley Rule & Level Co..... 47
Stevens Arms & Tool Co..... 56
Swaine, F. J. & Co..... 44
Tinnerman Steel Range Co..... 8
Tower Mfg. Co..... 49
Triumph Adjustable Stove Pipe Co 9
Twin City Fence & Wire Works..... 51
Udell Works..... 51
Utica Drop Forge and Tool Co 46-47
Van John Range Co..... 6
Weller Pattern Co..... 43
Welling Mfg. Co..... 55
Willard, Wm. G..... 8
Williams Stove Lining Co..... 44
Willis Mfg. Co..... 40
Wireton Heating Co..... 10
Wynn, Lewis D..... 44
Yawman & Erbe Mfg. Co..... 51
Zucker, Levett & Loeb Co..... 50

CLASSIFIED LIST.

Architectural Sheet Metal Work.

Berger Mfg. Co..... 42
Canton Steel Roofing Co..... 41
Friedley & Voshardt..... 42
Michigan Hardware Mfg. Co..... 41
Willis Mfg. Co..... 0

Building Paper.

Bradner, Smith & Co..... 45

Card System.

Yawman & Erbe Mfg. Co..... 51

Catalogue Cabinets.

Miller Catalogue Cabinet Co..... 52

Ceilings-Steel.

Berger Mfg. Co..... 42
Burton, W. J. & Co..... 11
Canton Steel Roofing Co..... 41
Eller, J. H. & Co..... 40
Friedley & Voshardt..... 42
Garry Iron Roofing Co..... 41
Gerock Bros. Mfg. Co..... 40
Illinois Roofing & Supply Co..... 42
La Crosse Steel Roof & Cor. Co..... 40
Michigan Hardware Mfg. Co..... 41

Cement.

Connors, Wm..... 1

Chains.

Standard Chain Co..... 51

Chimney Tops.

Berger Mfg. Co..... 42
La Crosse Steel R.& C. Co..... 40
Powers Bros..... 55

Conductor Strainers.

Canton Steel Roofing Co..... 41
La Crosse Steel Roofing & Cor.Co 40

Cornices.

Berger Mfg. Co..... 42
Burton, W. J. & Co..... 11
Canton Steel Roofing Co..... 41
Garry Iron & Steel Roofing Co..... 41
Gerock Bros Mfg. Co..... 40
La Crosse Roofing Co..... 40

Cornice Ornaments and Statuary.

Willis Mfg. Co..... 40

Cream Separators.

Galesburg Cornice Works..... 55
Lawrence Mfg. Co..... 55

Drills.

North Bros. Mfg. Co..... 52

Eave Troughs.

Berger Bros Co..... 55
Berger Mfg. Co..... 42
Canton Steel Roofing Co..... 41
Clark, Quien & Morse..... 49
Garry Iron & Steel Roofing Co..... 41
Illinois Roofing & Supply Co..... 42
La Crosse Steel Roof. & Cor. Co..... 40
Welling Mfg. Co..... 55

Elevators.

Kimball Bros..... 55

Enamel Ware.

Cleveland Stamping & Tool Co..... 48
Lalance & Grosjean Mfg. Co..... 48
Nat. Enameling & Stamping Co..... 45

Faucets

Clark Novelty Co..... 2

Files.

Barnett, G. & H. Co..... 1
Disston's, Henry Sons..... 47
Nicholson File Co..... 1

Flue Stoppers.

Welling Mfg. Co..... 55

Furnace Cement.

Connors, Wm..... 1

Furnaces—Tinners.

Clark Novelty Co..... 2
Clayton, Lambert & Co..... 40

Furnaces Warm Air.

Bergstrom Bros. & Co..... 12
Boynton Furnace Co..... 2
Brand Stove Co..... 8
Lennox Machine Co..... 11
Meyer Furnace Co..... 10
Monroe Furnace & Foundry Co..... 12
Mueller, L. J. Furnace Co..... 10
Phoenix Iron Works..... 11
Schwab, R. J. & Co..... 12
Smith, Chas. Co..... 13

Gasoline Stoves.

Monarch Stove Co..... 5
National Vapor Stove & Mfg. Co. 6
Ringen Stove Co..... 3
Standard Lighting Co..... 4

Hardware Specialties.

American Cutlery Co..... 55
Atkins, E. C & Co..... 56
Atlas Mfg. Co..... 1
Atlas Bolt & Screw Co..... 1
Blacklock Foundry Co..... 52
Caldwell Mfg. Co..... 56
Harkins & Willis..... 56
Iwan Bros..... 39
Kirk, H. N..... 51
Lalance & Grosjean Mfg. Co..... 48
Lee Glass, Andreesen Co..... 54
Lufkin Rule Co..... 55
Nat. Enameling & Stamping Co..... 45
North Bros. Mfg. Co..... 52
Plume & Atwood Mfg. Co..... 2
Schreiber & Conchar Co..... 11
Smith & Hemenway..... 46-47
Sperry, D. R..... 55
Tower Mfg. Co..... 49

Heaters—Hot Water and Steam

American Radiator Co..... 2-13
Kewanee Boiler Co..... 2

Horse-Shoes.

Old Dominion Iron & Nail Works 49

Hose Pipes.

Kirk, H. N..... 51

House-Furnishing Goods.

Blacklock Foundry..... 52
Cleveland Stamping & Tool Co..... 48
Enterprise Mfg. Co..... 47
Lalance & Grosjean Mfg. Co..... 48
National Enameling & Stamping Co..... 45
Sperry, D. R. & Co..... 55

Knives.

Smith & Hemenway Co..... 46-47

Lawn Mowers.

Philadelphia Lawn Mower Co..... 51

Lawn Sprinklers

Smith & Hemenway..... 46-47

Lamps

Acorn Brass Works..... 43-51
Chicago Solar Light Co..... 51

Metal Shingles.

Burton, W. J. & Co..... 11
Cortright Metal Roofing Co..... 55
Garry Iron & Steel Roofing Co..... 41
La Crosse Steel Roof & Cor Co..... 40

Metals-Perforated.

Aitchison, The Robt Perf'd Metal Co..... 41

Metallic Shutters.

Berger Mfg. Co..... 42
Burton & W J. Co..... 11
Canton Steel Roofing Co..... 41
Garry Iron & Steel Roofing Co..... 41
La Crosse Steel Roof & Cor Co..... 40

Mitre Boxes.

Smith & Hemenway Co..... 46-47

Nails.

Old Dominion Iron & Nail Works 49

Nail Pullers

Smith & Hemenway Co..... 46-47

Oil Stoves.

Monarch Stove Co..... 5
National Vapor Stove & Mfg. Co. 6
Ringen Stove Co..... 3
Standard Lighting Co..... 4

Paints.

Buckeye Paint & Varnish Co..... 44
Canton Steel Roofing Co..... 41
Dixon, Jos. Crucible Co..... 39
La Crosse Steel Roofing & Cor.Co. 40

Paper.

Bradner-Smith & Co..... 45

Patents.

Peck, Hubert..... 38

Plyers and Nippers.

Smith & Hemenway Co..... 46-47

Polish.

Buckeye Paint & Varnish Co..... 44
Hoffman, Geo. W..... 44

Radiators.

American Radiator Co..... 2-13

Razors.

Smith & Hemenway Co..... 46-47
Utica Drop Forge & Tool Co. 46-47

Registers.

Canton Steel Roofing Co..... 41
Fanner Mfg. Co..... 45
Henry & Scheible Co..... 9
Independent Register Co..... 1
Philadelphia Hardware & Malleable Iron Works..... 9

Roofing.

Berger Mfg. Co..... 42
Canton Steel Roofing Co..... 41
Cortright Metal Roofing Co..... 55
Eller, J. H. & Co..... 40
Garry Iron & Steel Co..... 41
La Crosse Steel Roofing Co..... 40
Osborn, The J. M. & L. A. Co..... 56
Perkins, J. L. & Co..... 1-41

Sad Irons.

Blacklock Foundry..... 52
Schreiber & Conchar Mfg. Co..... 11

Sash and Spot Cord.
Samson Cordage Works..... 1
Sash Locks.
Harley Burglar Proof Ventilating Sash Lock Co..... 49
Saws.
Atkins, E. C. & Co..... 56
Disston's Henry Sons..... 47
Saw Sets.
Disston's, Henry Sons..... 47
Morrill, Chas..... 47
Smith & Hemenway Co..... 46-47
Scales.
Pelouze Scale & Mfg. Co..... 47
Screw Drivers.
North Bros. Mfg. Co..... 52
Smith & Hemenway Co..... 46-47
Sporting Goods.
Peters Cartridge Co..... 50
Stevens, J., Arms & Tool Co..... 56
Skylights.
Burton, W. J. & Co..... 11
Canton Steel Roofing Co..... 41
Friedley & Voshardt..... 42
Garry Iron & Steel Co..... 41
Gerock Bros. Mfg. Co..... 40
Jones, J. H..... 2
La Crosse Steel Roof & Cor. Co.. 40
Silverplated Ware.
Rogers, S. L. & G. H..... 54
Step Ladders.
Udell Works..... 51
Stove Boards.
Michigan Hardware Mfg. Co.... 41
Stove Bolts.
Atlas Bolt & Screw Co..... 1
Stove Casters.
Independent Register Co..... 1
Fanner Mfg Co..... 45
Stove Guards.
Twin City Fence & Wire Works.. 51
Stove Lining.
Connors, Wm..... 1
Bridgeport Crucible Co..... 44
Williams Stove Lining Co..... 44
Stove Patterns.
Cope, Geo. W. Pattern Works.... 43
Gobeille Pattern Works..... 43
Mersfelder, W. L..... 43
Weller Pattern Co..... 43
Stove Pipes.
Triumph Adjustable Stove Pipe Co 9
Stove Polish.
Ayling Bros..... 44
Dixon, Jos. Crucible Co..... 39
Wynn, Lewis D..... 44
Stove Repairs.
American Stove Repair Co..... 43
Brauer, A. G..... 43
Dust, Wm. L. Stove Repairing Co 43
Great Western Stove Repair Co.. 43
Stoves and Ranges.
Beckwith, Estate of P. D..... 14
Brand Stove Co..... 8
Champion Steel Range Co..... 8
Cox, Abram Co..... 7
Detroit Stove Works..... 9
Enterprise Stove Co..... 11
Quincy Stove Works..... 9
Richmond Stove Co..... 8
Ringen Stove Co..... 3
Tinnerman Steel Range Co..... 8
Van John Range Co..... 6
Willard, Wm. G..... 8
Stove Trimmings.
Atlas Bolt & Screw Co..... 1
Columbus Bolt Wks..... 1
Fanner Mfg. Co..... 45
Tacks.
Tower Mfg. Co..... 49
Tape Measures.
Lukfin Rule Co..... 55
Tinners' Tools and Supplies.
Berger Bros. Co..... 55
Double Truss Cornice Brake Co... 41
Lufkin Rule Co..... 55
Perkins, J. L..... 1-41
Stanley Rule & Level Co..... 47
Swaine, F. J. & Co..... 44
Tinplate.
American Tin Plate Co..... 40
Illinois Roofing & Supply..... 42
McClure & Co..... 56
Merchant & Co..... 41
Osborn, J. M. & L. A..... 56
Tinware.
Cooney & Geiger..... 42
National Enameling & Stamping Co..... 45
Toasters.
Harkins & Willis..... 56
Vapor Stoves.
Monarch Stove Co..... 5
National Vapor Stove & Mfg. Co. 6
Ringen Stove Co..... 3
Standard Lighting Co..... 4
Ventilators.
Berger Bros. Co..... 55
Berger Mfg. Co..... 42
Burton, W. J. & Co..... 11
Garry Iron & Steel Roofing Co.... 41
Gerock Bros. Mfg. Co..... 40
Globe Ventilating Co..... 56
La Crosse Steel Roof. & Cor. Co.. 40
Powers Bros..... 55
Washing Machines.
Brammer, H. F. Mfg. Co..... 49
Clark, Quien & Morse..... 49
Randleman & Sons..... 49
Wagons.
Shipman, Bradt & Co..... 49
Wire Fences.
Twin City Fence & Wire Works. 51

TINPLATES AND FOREIGN MATERIAL.

A remarkable new situation has appeared in the tinplate trade of the Southern Principality, and it is one which is certain to have far-reaching effects. As is well-known, for some time past the German steel manufacturers have been making a severe onslaught upon the British market with their semi-raw material in the shape of steel tin bars and billets for rolling down into finished material at English ironworks. Hitherto the competition has been mostly confined to material for transformation in our native works into sheets, bars, hoops, etc. Now, however, the German prices have got down so low, and the conditions which they are offering to native consumers have become so favorable, that the tinplate manufacturers of South Wales have commenced to patronize the newcomer in quantities. The results to the tinplate trade are not yet very obvious, the change not having yet extended over a sufficient period to test the point, but lower prices for tinplates before long should be the natural corollary. Meanwhile it appears that contracts have recently been closed between tinplate makers and representatives of German firms for the supply of thousands of tons of steel bars for sheets and tinplates, and at a price that cannot be touched by Welsh makers, the difference being anything between 12s. and 15s. per ton in favor of the German bars. There had existed among steel makers and others in Wales a belief that the Germans in sending steel to this country were only doing this in consequence of pressure exercised upon them by the German bankers, who had advanced money in large sums for works extensions and other purposes and who were now compelling makers to realize stocks. Unfortunately, circumstances do not now tend to verify this view. The German competition seems likely to be much more prolonged than had been anticipated. Instead of terminating with this year the foreigners, it is now stated, are entering into contracts for supplies over the first quarter of next year, and in some cases even beyond that period, while the tonnage offered is of greater volume than ever. In the Midland district of England alone it is estimated that the quantity of German material imported during the last few months amounts to at least 20,000 tons, chiefly for sheet manufacture, some firms consuming as much as 1,500 to 2,000 tons per week, and this is only a sample of what is going on elsewhere. To the Welsh tinplate manufacturers who object to the high prices of native material the continental steel importations are a godsend. But to the Welsh steel manufacturers the case is far from different; if the continental supplies continue, the situation means serious loss of custom, and the Siemens tin bar makers in particular are greatly affected, and threats to close the Siemens' steel mills are heard in certain directions. It is to be hoped that this extreme course will be avoided; meanwhile, the postion is one which tinplate buyers should watch in expectation of possible important developments.—*Mining Journal.*

MINERAL DEPOSITS IN PERSIA.

The potentialities of Persia as a mineral field are, perhaps, not so well known as they deserve to be, the recognition of its wealth scarcely extending beyond its turquoise mines, which are the chief source of the world's supply. The mines are situated near Naishapur, in the Khorassan, in the northeast of Persia, not far distant from the Russian boundary. Operations are carried on both in mines and quarries, and as the work is done by local enterprise the methods are naturally primitive. Besides gems, however, recent reports go to show that petroleum is widely diffused through the country, both around the southern part of the Caspian as well as contiguous to the Tigris Valley, and in the neighborhood of the Persian Gulf. Coal is also worked locally, though owing to native methods it cannot be said to have been as yet established as a commercial proposition. Besides these important fuel resources, copper, argentiferous lead, iron ore, arsenic, sulphur, cobalt, antimony, borax, and tin are reported to exist in large quantities in the mountains, though, of course, in the present rudimentary state of Persian communications they possess only potential value. However, the fact of their existence gives fresh interest to the struggle now proceeding for supremacy in the dominions of the Shah, and it would hardly be surprising if the Germans, with their activity in Syria and Mesopotamia, should interpose as a third interest in the duel which is now proceeding between the Russians and ourselves. Considering the impotence of the Russians to successfully develop their native mineral resources, it is sincerely hoped that British influence may be consolidated in the country both politically and commercially.—*Mining Journal.*

Trade Report.

BRADSTREET'S ON IRON AND STEEL SITUATION.

The editor of Bradstreets telegraphs us this advance report of the iron and steel situation:

Among the industries iron and steel is still easily first in the volume of new business and in production, although the car shortage is shown to have materially reduced the December output of pigiron. Sales of the latter this week have been very heavy, fully 160,000 tons having been taken, most of it at Pittsburg, and the bulk of it for delivery in the latter part of the year. Prompt deliveries command a premium, and the same is true of steel billets. The car shortage trouble has further improved, but a number of furnaces are still banked, owing to insufficient supplies of coke. That it is a shortage of motive power as much as of car capacity is proved by the reported hiring of 100 locomotives by a prominent railway system to help out its own facilities. Conservatism in the matter of advancing pigiron prices is still noted. Southern producers announce that they will discourage any advance beyond $12 for No. 2 at Birmingham. Conservative plans may, however, be disarranged if the scarcity becomes more acute. Predictions of advances in foundry and charcoal grades are confirmed by price changes this week. Finished products tend high. The advance in wire products is confirmed, price cutting is to be stopped; rods are stronger and sales of plates, merchant bars and structural are large.

WIRE NAILS.

Wire nails, in small lots, from stock, are quoted at $2.15 to $2.25, and $2.10 in carload lots.

CUT NAILS.

With only a moderate demand, cut nails are quoted at $2.30 in small lots.

BARB WIRE.

Painted barb wire is quoted at $2.70 to $2.80 in small lots, and $3 to $3.10 for galvanized, with 5 cents off for carload lots.

PLAIN WIRE.

Plain wire is quoted at $2.15 to $2.25 in small lots.

BILLETS.

Only a few small sales in small lots have been reported during the last week. Bessemer is quoted at $31 to $33, and open-hearth, $33 and $35.

BARS.

The demand for iron and steel bars continues strong, with prices very firm, and there is a very satisfactory amount of new business. The demand for material from car builders, wagon and implement manufacturers is so great that premiums are offered daily to get desired shipment. We quote iron and steel, 1.65c Chicago; out of store, 1.90c to 2c.

SHEETS.

All the mills report a good business, and orders have been placed several months in advance. The scarcity of cars is still seriously interfering with early deliveries, forcing many consumers to supply their wants through jobbers. We quote No. 27 black, 3.50c, and galvanized, 70 per cent to 70 and 5 per cent.

STRUCTURAL STEEL.

The demand for structural steel is very good, and the aggregate tonnage of smaller orders is up to that of previous weeks. Contracts have been let to Pittsburg mills for the structural steel which will be required in the erection of the First National Bank and Young's buildings in this city, which will require about 18,000 tons of structural shapes. The mills are still months behind in their deliveries and contending with a scarcity of cars. Heavy sections of beams can be secured in four to six weeks; light sections and angles in three months; universal plates, six to eight weeks, and sheared plates in four weeks. We quote mill shipments, carload lots, as follows: Beams, 15 inches and under, 1.75c; 18 inches and over, 1.85c; angles, 6x6 and under, 1.75c; over 6x6, 1.85c; plates, 1.75c, base; tees, 1.80c; zees, 1.75c; small lots from store, ½c to ¾c higher; beams and channels from store, ½c to ¾c per pound higher.

MERCHANT STEEL.

There is a steady demand for this material from all sources, many consumers exceeding their contracts. A number of contracts have been closed in the East, mostly for delivery after April 1st. We quote mill shipments, Chicago delivery, as follows: Smooth finished tire steel, 1.85c to 2c; open-hearth spring steel, 2.25c to 2.50c; toe calk, 2.40c to 2.60c; sleigh shoe, 1.65c to 1.80c; cutter shoe, 2.40c to 2.60c; ordinary tool steel, 6c to 7c; specials, 13c and upwards; less than carload lots, 5 per cent to 10 per cent higher.

WHITE LEAD IN OIL.

White lead in oil is quoted at 6c per pound, in lots of 500 pounds or over; 6½c per pound in less than 500 pound lots.

LINSEED OIL.

City raw linseed oil is quoted at 60c to 62c per gallon, in less than 5-barrel lots.

SPIRITS TURPENTINE.

Southerns, 40½c to 41c; machine made barrels, 41c to 41½c per gallon.

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	10x14	$7 50
IX	10x14	9 00
IC	12x12	9 00
IX	12x12	10 50
IC	14x20	7 50
IX	14x20	9 00
IXX	14x20	10 50
IXXX	14x20	12 00
IXXXX	14x20	13 50
IC	20x28	15 00
IX	20x28	18 00
IXX	20x28	21 00

COKE PLATES.

Cokes, 180 lbs	IC	20x28	10 50
Cokes, 200 lbs	IC	20x28	10 75
Cokes, 216 lbs	IC	20x28	11 00
Cokes, 216 lbs	IX	20x28	13 50

PIG IRON.

Lake Sup. Charcoal	$19 25@$19 75
Local Coke Fdy No. 1	16 00@ 16 10
Local Coke Fdy No. 2	15 50@ 16 00
Local Coke Fdy No. 3	15 00@ 15 50
Local Scotch Fdy No. 1	16 00@ 16 50
Local Scotch Fdy No. 2	15 50@ 16 00
Southern Coke No. 1	16 40@ 16 65
Southern Coke No. 2	15 65@ 15 90
Southern Coke No. 3	15 15@ 15 40
Southern Coke No. 4	14 65@ 14 90
Southern No. 1 Soft	16 15@ 16 40
Southern No. 2 Soft	15 55@ 15 90
Southern Gray Forge	14 65@ 14 90
Southern Silveries	16 65@ 17 65
Jackson Co. Silveries	17 00@ 17 50
Ohio Strong Softeners	17 50@ 18 00
Alabama Car Wheel	20 50@ 21 00
Malleable Bessemer	16 50@ 17 00
Coke Bessemer	18 00@ 18 50

BEVELS.

Stanley's Rosewood Handled, T., new list 33⅓%

BLACK SHEET STEEL.

¼ in. 3-16 in. Nos. 8 and 10.	per lb.	$3 80
No. 12	per lb.	3 85
No. 14	per lb.	3 90
No. 16	per lb.	3 40
No. 18-21	per lb.	3 50
No. 22-24	per lb.	3 60
No. 25-26	per lb.	3 70
No. 27	per lb.	3 80
No. 28	per lb.	3 90

SMOOTH STEEL.

		per lb.
Wood's Smooth Steel,	15-17	$4 00
" " "	18	4 10
" " "	20	4 20
" " "	22-24	4 30
" " "	25-26	4 40
" " "	27	4 50
" " "	28	4 60

PATENT PLANISHED SHEET STEL.

Patent Planished Sheet Steel. ..... "A" $10 20, "B" $9 20

GALVANIZED IRON.

Galvanized Iron ..... 70 to 70 & 2½%

SOLDER.

Extra 18½c

Commercial 17½c

SHEET ZINC

600 lb. Casks, base ..... 7c per lb.

COPPER.

Copper ..... base, 20c

TIN PIGS AND BARS.

Banca, pigs, per lb ..... 28¾@28¾c
straits pigs, per lb ..... 28 @28¾c
straits in bars, per lb ..... 28¾@29c

LEAD.

American Pig ..... 4.60@4.62½c
..... 5½@¾c

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name higher figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers nd jobbers.)

ADZES—CARPENTERS'.

Hunt's	25%
White's	12½%
Coopers'—Barton's	12½%
White's	12½%
Ship—Barton's	12½%
White's	15%
Hunt's	25%

AMMUNITION

CAPS, PERCUSSION—per 1000—

F L Waterproof, 1-10s	50c
G D	40c
Eley's	52c

CARTRIDGES.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&5%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal	10&10%
Peters Blank Ctgs. 32 cal	10&10%
Peters B B Caps, Round ball	$1 18
Peters B B Caps, Conical ball	$1 90
U. M. C. Rim Fire Ctgs	50&3%
U.M.C. Cent. Fire, Pistol & Rifle	25&3%
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. Blank Ctgs. 22 & 32 cal	10%
U. M. C. Blank Ctgs. 38 cal	50-10-10%
U. M. C. B B Caps, Round Ball	$1 75..25&10%
U .MC. B B Caps, Con. Ball	$2 00 net
U. M. C. Rim Fire Shot Ctgs	50&15&3%
U. M. C. Cent. " " "	25&10&3%

PRIMERS.

Berdan Primers	$1 00
Peters Primers	1 10
U. M. C. Primers	1 08
Winchester Primers	1 08

SHELLS.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&5%
Peters Empty Paper Shells, 16 gauge. League	20&5%
Peters New Victor Nitro shells	15%
Ideal	33⅓&10%
Peters Loaded Shells. League and Semi-Smokeless	40&5%
Peters New Victor Loaded Shells, with King's Smokeless	40&10&10%
Ideals Loaded with Kings Smokeless	40&10&10&5%
U. M. C, New Club, 16 guage	20&10%
U. M. C. New Club 10 & 12 gauge	33⅓&5%
U. M. C. New Club	33⅓&5%
U. M. C. Nitro	1 %
U. M. C. High Base	1b
U. M. C. Trap	33⅓&10&7%
Winchester Blue Rivals } Winchester Yellow Rivals }	20%
Winchester Repeater	18%
Winchester Leader	33⅓&10&7%
U. M. C. Loaded Shells. Black Powder } Winchester Loaded Shells, Black Powder }	40&5%
U. M. C. } Winchester } Smokeless	40&10&10&5%

GUN WADS—per 1000.

Peters Gun Wads	20&5%
U. M. C. Gun Wads	20&5%

POWDER.

King's Quickshot Powder; Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.	
King's Semi-Smokeless	20&5%
King's Smokeless	25, 20 & 10
Austin Quickshot Powder, Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.	
Dupont Smokeless, Sporting	25 20 & 10c.

SHOT

Drop shot, sizes smaller than B, 25-lb bags, per bag	$1 45
Drop shot, B and larger sizes, 25-lb bags, per bag	1 70
Buck Shot, 25-lb bags, per bag	1 70
Chilled Shot, 25-lb bags, per bag	1'70

ANVILS.

Hay-Budden, 70 to 84 lbs	10c per lb
Hay-Budden, 85 to 150 lbs	9c per lb

AUGERS AND BITS.

Snell's Boring Mach. Augers	60&10&5%
Snell's Car Bits, 12-inch twist	40%
Jennings' Pattern Auger Bits	50&10%
Russell Jennings' Augers and Bits	25&10%
Ship Augers, L'Hommedieu Bits	15%
Irwin	50%
Climax Bits	60&10%

AWLS.

Brad, handled	per doz. $ 85
Brad, shouldered, assorted 1 to 4	per gr. 2 00
Brad, shouldered, assorted 1 to 6	per gr. 2 50
Peg, Pat	per gr. 60
Peg, shouldered	per gr. 1 00
No. 1, Scratch, handled	per gr. 4 80
No. 5, Scratch, socket	per doz. 6 00

AXES.

Lippincott	per doz	6 50
Mann	"	6 50
Second quality	"	6 00
Beveled axes, add	"	50
Broad—		
Peerless can patt	"	28 50
Hunt's	"	30
White's	"	12%
Hand—		
Hunt's	"	40
White's	"	12%
Ship—		
White's	"	12%

AXLES.

Common iron, long arm, sq. bed	5¼
Concord iron. long arm, sq. bed	6¼
Concord express, long arm, steel, square bed	6¼
Coach shape on above, ex. per. lb.	⅛
Short arms on above, extra per lb.	2
Welded axles on above, ex. per. lb	1¼
Half Patent, steel, Nos. 7 to 14	70
Half Patent, steel, Nos. 19 to 22	70
Extra, coach shape, 1¼ & smaller	per set 15
Extra, coach shape, 1¼ 1½, per. set	30
Extra, coach shape, l'g'r, per. set	$1 00
National Wrought Steel Tubular, Self-Oiling—	
Standard Farm (1 to 5) and Special Farm (A1 to A5) less than ten sets	20%
Over ten sets	25

BEAMS—SCALE.

Scale Beams, List Jan. 12, 82	35%
Frary's	40%
P. S. & W	30%

BELLOWS.

Blacksmiths	70%
Hand, 6½ in	per doz. $4 50
Molders', 10 in	per doz. 9 00

BELLS.

COW.

Ordinary Goods	70&10%
Hig Grade	60&10%
Jersey	75&10%
Texas Star	50&10%

DOOR.

Abbe's Gong	45%
Barton Gong	55%
Home, R. & E. Mfg. Co.'s	55&10%
er and Pull, Sargent's	20&10&10%

HAND.

Hand Bells, Polished	60@60&10%
White Metal	55@55&10%
Nickel Plated	50@50&10%
Swiss	60%
Silver Chime	33⅓@33⅓&10%

MISCELLANEOUS.

Farm Bells	lb. 2¼ to 2½c
Steel Alloys. Church and School	50&10&50@60%
Wilmot & Hobbs Mfg. Co Gong	70%

BLOCKS.

Common Wooden	70%
Eddy Steel Tackle Blocks	66 2-3&5%

BOLTS.

CARRIAGE, MACHINE, ETC.

Common, list Jan. 30, 95	65%
Norway Iron, $3.00, list Oct. 7, '84	75&10%
Bolt Ends, list Jan. 30, '95	50&10%
Machine, list Sept. 20, '99	65&10%

DOOR AND SHUTTER.

Ives' Patent Door	60%
Wrought Barrel, Standard list.	70&10%
Wrought Flush	40&10%
Wrought Square, Standard list	65%

STOVE AND PLOW.

Plow	40&10%
Stove, list December 28, 1899	70to75%

TIRE

Common, list Dec. 28, '99	70&10%
Eagle Philadelphia	72½%
Norway	75%

BORING MACHINES.

Jenning upright without Augers ..$2 00

BOXWOOD RULES.

No. 4	$11 00	per doz
" 12	16 00	" "
" 18	6 00	" "
" 26	11 00	" "
" 27	13 00	" "
" 29	4 50	" "
" 66	10 00	" "
" 66½	10 00	" "
" 67	6 00	" "

Boxwood, new list	60&10%
Ivory	40&10%
Lufkin's Steel	50&10%

BRACES.

Barber's	50&19%
Common Ball, American	$1 50
Fray's Genuine Spofford's	60%
Fray's No. 307 to 322	40&5%
Fray's No. 508 to 522	50%

BRACKETS.

Cast Iron Plain	50&10
Wrought Steel	70&10 @ 75%
Bradley's	75 @ 75&10%

BROILERS.

Wire Goods Co ..... 70&5%

BUTTS.

Bright Butts, Nos. 800, 802, 804, 806, 808, 810, 814, 816, 818, 820, 854	70%
Bright Butts, Nos. 826, 828, 829, 830, 832, 834, 836, 838, 840, 842, 843, 844, 845, 846, 848	70%
Bright Butts, Nos. 822, 822½, 823, 823½	70%
Japanned Butts, Nos. 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 726, 727, 728, 729, 730, 731	70%

CAGES—BIRD.

Enameled	40%
Brass 1200 series	33⅓%

CASTERS.

Bed	60&10
Plate Casters	60&10
Martin's Patent (Phœnix)	50

CHAIN.

American Coil Chain, Less than Cask lots:

3-16	¼	5-16	⅜	7-16	½	9-16
8.40	6.30	5.25	4.35	4.20	4.10	

⅝ ¾ ⅞ to 1
4.05 4.00 4.00c. per lb.

Less than Cask lots add 25c.

German Coil, list July 24, '97	60&10&10%
German Halter Chain, list July 24 '98	60&10&10%

Traces, Western Standard: 100 pair

6½—6-3, Straight, with Ring	29.00
6½—6-2, Straight, with Ring	30.00
6½—8-2, Straight, with ring	34.00
6½—10-2, Straight, with ring	37.50

Add 2c per pair for Hooks.
Twist Traces 2c. per pair higher than Straight Link.

Trace, Wagon and Fancy Chains Eastern list	50&10%
Jack Chain, lis July 10 '93:	
Iron	60@60&
Brass	60@60&

Safety Chain.....70%
Gal, Pump Chain.....lb. 4¼@4½c
Covert Sad. Works:
Breast, Hitching and Rein Chains.....70%
Covert Mfg. Co.:
Breast.....35&2%
Halter.....35&2%
Heel.....35&2%
Rein.....35&2%
Stallion.....35&2%
Oneida Community:
Eureka Coil & Halter40&10% new list
Niagara Coil and Halters40@10% "
Niagara Cow Ties..45&5@45&10&5%
Am. Coil and Halters..50&10&5@60%
Am. Cow Ties.....35&5@40&5%
Wire Goods Co.:
Dog Chain.....60&10%
Universal Dbl-Jointed Chain....50%

CHALK.

Blue.....per gross 60c
Red..... " 50c
White..... " 45c

CHALK LINES.

Chalk lines.....per doz. $2 50

CHISELS.

Mix..... } 70%
Witherby..... }

CLAMPS.

No. 25 Adjustable.....50&10 to 60%
Carriage Makers.....60%

CLEANERS.

Pot .....per doz $1.10

CLEAVERS.

Beatty's .....dis 40
White's .....dis 15

CLIPPERS.

E. H. Hotchkiss Horse Clippers
No. 10.....per doz $18 00
No. 30..... " 15 60
No. 22..... " 13 80
No. 20..... " 13 20
No. 8..... " 10 80
H. Hotchkiss Toilet Clippers
No. 1.....per doz 9 60
No. 101..... " 10 80
No. 201..... " 10 80
No. 300..... " 13 20
No. 500..... " 15 00

COFFEE MILLS.

Enter. Mfg. Co., list Jan. 17, '93....25%
Parker's.....50&10%
Arcade.....60&10%

CORKSCREWS.

Howes .....25&22%
Humason & Beckley.....40&10%
Empire 40%
Walker's .....net
Williamson's Regular.....40%
Williamson's Forged Worm...40%

DOG COLLARS.

Pope & Stevens' List:
Brass (full Assortment).....net price

DOOR CHECKS.

Blount.....30%
Eclipse.....30%
Corbin.....30%

DRILLS AND DRILL STOCK.

ommon Blacksmith's Drill .....$1 50@$1 60
Bench Drills, Stearns'.....5 50& 6 00
Blacksmith's Self-feeding, each, ...$5 00&$7 00
Breast, Millers Falls..... .....each, $2 25 net for No. 12
Godell Automatic Drills,$12 00to$15 00

DRILL-BIT STOCK.

Standard List.....60&10@70%

DRILLS—TWIST.

Standard List.....60&10@65%
Straightened taper shanks to 1/3 in.

EGG BEATERS.

Standard Co.:
No. 5 Steel Handle Dover per gross.....$ 6 50
No. 10 Cast Handle Dover pr gr 8 00
No. 10 Steel H'ndle Dov'r pr gr 8 00
No. 15 Extra Heavy Steel Handle per gr..... 15 00
Rival per gr..... 10 00
Taplin Mfg Co.:
No. 50 Small Family size pr gr 6 50
No. 100 Regular Fam size pr gr 8 00
No. 102 Regular Family size tinned pr gr..... 9 50
No. 150 Large Fam size pr gr.. 15 00
No. 152 Large Family size tinned pr gr..... 17 00
Lyon's Standard size per doz.. 1 75
Wonder (S. S. & Co.) per gr.... 7 50

ENAMELED STEEL WARE.

Royal (N. E. & S. Co.)....70 to 70&10%
Peerless (L. & G. Mfg. Co.)...70&10%
Agate Nickel Steel Ware.....50&20%
Pearl Agate Ware.....50&20%
Blue and White Ware.....60&10%
All White Ware (with blue border.....50&10&5%
Regal Steel Ware.....60&10%

FASTENERS, BLIND.

Zimmerman's.....50&10%

FAUCETS.

Standard Metal Key.....25%
B. & L. B. Co.
Redlich's Wood Faucets.
Red Cedar .....
Oak.....
Cherry..... } Net Prices.
Cork Lined.....
Metal Key.....
Self Measuring:
Enterprise, per doz. $36 00.....40%
Cork Lined.....70&5@70&10&5%
Metallic Key, Leather Lined .....70@70&10%
Red Cedar..... .....50@50&5%
B. & L. B. Co.:
West's Lock, Open and Shut Key..... .....50&10%
John Sommer's Peerless Tin Key..40%
" " Boss Tin Key 50%
" " Victor Metal Key..50&10%
" " Duplex Metal Key....60%
" " Diamond Lock.....40%
" " I X L Cork Lined....50%
" " Reliable " " ..50&10%
" " Common " " 70%
" " Chicago " " 60%
" " O K " " 50%
" " Perfection Cedar.....40%
Star..... .....60@60&5%
Star, Metal Plug new list... 40@40&5%
Lockport, Metal Plug, reduced list..... .....60&5%
McKenna, Brass:
Burglar Proof, N. P.....35%
Improved, ¾ and ⅞ inch.....35%
Self Measuring:
Enterprise, per doz $36.00.....40%
Lane's, per doz. $36.00.....40&10%
National Measuring, per doz. $36.00..... .....40%

FILES AND RASPS.

Great Western.....75&5%
J. B. Smith.....75&5%
Arcade..... .....75&5%
K. & F.....75&5%
American.....75&5%
McClellan..... .....75&5%
Eagle.....70,10&5%
Nicholson .....70&10%
Royal.....80@80&10%
Black Diamond.....70&10%
Disston's.....75& 5%

FILE HANDLES.

Nicholson File Co.'s "Simplicity" File Handles, per gross .....$.85 to $1.50

FORKS AND HOES.

Coke and Cottonseed Forks....40&5%
Coal Forks.....40&10%
Barn or Ice Forks.....40&5%
Beet Forks..... .....30&10
Ballast or Stone Forks.....40&5%
Tanners' Forks.....40&5%
Shaving Forks.....40&5%
Potato Scoop Forks.....40%
Oyster Forks.....40&5%
Sluice Forks.....40&5%
Heavy Mill, Manure or Street Forks.....70%
Steel Tar or Asphalt Rakes.....65%
Asphalt Hoes.....65%
Two Tine Hay Forks, Std. Size...65%
3 Tine Hay Forks, Std. Size.....70&5%
Four Tine Hay Fork, Std. Size..66⅔%
Socket Four Tine Hay Forks..66⅔&5%
Socket Four Tine Manure Forks...70%
Socket Four Tine Spading Forks .....70&5&5&2½%
Three Tine Hay Header and Baler Forks.....67½&2½%
Four Tine Hay Header and Baler Forks.....66⅔%
Grain or Barley Forks.....70&10&10%
Four Tine Manure Forks...70&10&5%
Five & Six Tine Manure Forks70,10&5%
Spading Forks.....70&10&5%
Potato Digging Forks.....65%
Stone Picking Forks.....65%
Garden Hoes.....75&10&5%
Meadow and R. I. Hoes...75&5&2½%
Sunbeam Meadow Hoes.....75&5&½%
Mortar and Street Hoes....75&10&5%
Planter Hoes, Regular Pattern.70&30%
Tobacco Hoes.....75&20%
Cotton Hoes.....70&10&10&5&2%
Rough Fin. Shank Cot. Hoes 75&12½%
Cotton Chopper Hoes....75&10&7½%
Ladies' Cotton Hoes.....75&10&7½%
Malleable Rakes.....75%
Toy Ladies' and Boys' Hoes.....70&10to70&10&5%
Weeding Hoes and Rakes.....75&5%
Potato Hooks.....70&5%
Hop Hooks.....60&10&2¾%
Steel Garden Rakes.....75%
Steel Garden Rakes Stamped blank 70%
Turf Edgers.....60&5%
Steel Road Rakes.....65%
Special Mortar Hoes.....40&10&2½%
Harpers' No. 7 Mortar Hoes.....65%
Truck Hoes.....50&10&2%
Hoes.....65%
Special Hoes.....75&10&2%
Hoe Down Hooks.....75&10&2%
Warren Hoes.....60&5%
Laid Steel Edge Hoes.....25, 5&2%

GAUGES.

Marking, Mortise, etc.....60%
Stanley R. & L. Co.'s Butt & Rabbet Gauge.....Net
S. & H. Cos.....75%

GIMLETS.

Gimlets.....60%

GLASS CUTTERS

Woodward.....33⅓&10%
Red Devil.....33⅓&10%
Bonney V. & T. Co.....40&10%

GLUE POTS.

Tinned.....30%
Enameled.....35%

GLUE.

Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List

GREASE, AXLE.

Fraser's.....Net
Baum's Castorine.....Net

GRINDSTONE FIXTURES.

Stowell's..... Net
Reading Hardware Co.....Net

HAMMERS.

"Artisan's Choice," A. E. Nail..40&5%
Engineer's and B. S. Hand.....60%
Machinist's Hammers..50&10&5%to60%
Bell Face, A. E. Nail.....40&12½%
S. & H. Cos. No. 20 ....per gross. 5 25

HANDLES—IRON, WROUGHT OR CAST—DOOR OR THUMB.

No. 0. .....per doz $0 90 } Dis. 50
No. 1..... " 1 00
No. 2..... " 1 18
No. 3..... " 1 35
No. 4..... " 1 50
Bronze iron drop lat., per doz net $1 10
Japanned store door.....net 1 10
Barn door No. 5..... " 1 35
Chest and lift.....dis 50
Wood—
Saw and plane..... " 45
Hammer, hatchet, axe, etc.... " 45
Brad awl.....per gro. 45
Hickory firmer chisel..... } 25
Apple firmer chisel.....
Socket firmer chisel.....
Socket framing chisel,.....
File.....per gro. $2 80
Auger, assorted..... 5 00
Hoe, rake, shovel, etc..... 50
Cross Cut Saw—
Atkins' No. 1.....per pair 28
" No. 3..... " 18
" No. 6..... " 12
Triumph..... " 12
Common loop..... " 10

HANGERS.

Chicago Spring Butt Co.:
Friction.....25%
Oscillating 25%
Big Twin.....25%
Cronk Hanger Co.:
Loose Axle..... .....60%
Roller Bearing.....60&10%
Lane Bros.:
Parlor, Ball Bearing $4.00
Parlor, Standard 3.25
Parlor, New Model 2.75
Parlor, New Champion..... 2.40
Barn Door, Standard .....60&10%
Covered .....50&10&10&5%
Special .....60&10%
Lawrence Bros.:
Advance.....60%
Cleveland .....60&10%
Crown.....60%
New York.....60%
Peerless .....60&10%
Sterling 60%
McKinney Mfg. Co.:
No. 2, Standard, $18.....60&10%
No. 1, Special, $13.....60&10%
Stowell Mfg. and Foundry Co.:
Acme Parlor Ball Bearing 40%
Atlas.....50&10%
Badger Barn Door.....50%
Baggage Car Door.....50%
Climax Anti-Friction.....50%
Elevator 40%
Express.....50%
Interstate .....50&10%
Lundy Parlor Door.....50%
Matchless.....50&10%
Nansen.....60&10%
Stowell Parlor Door 50%
Railroad 50%
Street Car Door.....50%
Steel, Nos. 300, 404, 500.....40&15%
Wild West.....50%
Zenith for Wood Track 50%
Taylor & Boggis Foundry Co.:
Kidder's .....50@50&10%
Wilcox Mfg. Co.:
Bike Roller Bearing .....60&10%
C, J. Roller Bearing.....60&10%
Cycle Ball Bearing.....50%
Dwarf Ball Bearing.....40%
Ives, Wood Track.....60&10%
L. T. Roller Bearing.....60&10&5%
New Era Roller Bearing .....50&10%
O, K. Roller Bearing.....60&10&5%
Prindle, Wood Track 60%
Richards' Wood Track 60%
Richards' Steel Track .....50&10%
Spencer Roller Bearing.....60&10%
Tandems, Nos. 1 and 2.....60%
Underwriters' Roller Bearing....40%
Wilcox Auditorium Ball Bearing 20%
Wilcox Barn Trolley No. 123 ....40%
Wilcox Fire Trolley, Roller Bearing 30%
Wilcox Le Roy Noiseless Ball Bearing 40%
Wilcox New Century ....50&10&10%
Wilcox Trolley Ball Bearing.....40%

HATCHETS.

American Axe and Tool Co..... } 40&10%to40&10&5%
Blood's.....
Hunt's.....
Hurd's.....
Mann's.....
Underhill's.....
C. Hammond & Son..
Fayette R. Plumb....

HAY AND STRAW KNIVES.

Lightning.....$5 50

HINGES.

BLIND AND SHUTTER.

Surface Gravity Locking Blind: (Victor; National; 1868 O.P.; Niagara; Clark's O. P.; Clark's Tip; Buffalo.)
No.....1 3 5
Doz pair.....$0.75 1.45 2.90
Mortise Shutter:
(L. & P., O. S., Dixie. &c.)
No.....1 1½ 2 2½
Doz. pair.....$0.60 55 52 45
Mortise Reversible Shutter, (Buffalo, &c.)
No.....1 1½ 2
Doz. pair.....$0.65 .60 .55
Parker.....70@75%
North's Automatic Blind Fixtures, No 2, for Wood $9.00; No. 3, for Brick $11.50.....10%
Reading's Gravity.....75&10%
Sargent's, No. 1, 3, 5.....66⅔&10%
Sargent's, Nos. 11 & 13.....70&10%
Wrightsville H'dware Co.:
O. S., Lull & Porter.....80&2½%
Acme, Lull & Porter.....75&10%
Queen City Reversible.....75&10%
Stenger's Positive Loeking, Nos 1 & 3.....70&10&5%
Shepard's Noiseless, Nos. 60, 65, 55 70&10%
Niagara, Gravity Locking, Nos. 1, 3 & 5.....75&7½%
1868, Old Pat'n. Nos. 1, 3 & 5 75&7½%
Tip Pat'n, Nos. 1, 3 & 5.....75&7½%
Buff. Gravity Lock., 1, 3, 5..75&7½%
Shepard's Double Locking, Nos. 20 & 25.....70&10%
Champion Gravity Locking, No 75 75&7½%
Steamboat Gravity Locking, No 10 5&7½%
Pioneer, Nos 060, 45 & 5½..75&7½%
Empire, Nos 101 & 103.....70&7½%
W. H. Co's Mortise Gravity Locking No. 2.....60&10%
Stanley's Steel Gravity Blind Hinges, per doz. sets $1.30.....30&10%

GATE.

Clark's or Shepard's—Doz. sets:
No.....1 2
Hinges with Latches$1.90 2.50

Hinges only..... 1.30 1.90 2.90
Latches only..... 65 65 95
New England:
With Latch.....doz....@$1.55
Without Latch.....doz....@$1.25
Reversible Self-Closing:
With Latch.....doz....@$1.80
Without Latch.....doz ...@$1.45
Western:
With Latch.....doz. $1.40@1.75
Without Latch.....doz. $0.95@1.30
Wrightsville H'dware Co.:
Shepard's or Clark's Nos. 1 & 2.... 65&2½%
Shepard's or Clark's, No. 3....55&5%

SPRING

Holdback, Cast Iron, gros. $8.00@8.25
Non-Holdback, Cast Iron.... ... gro. $6.75@7.25
Extra 10% often given on most of these hinges.
J. Bardsley:
Bardsley's Patent Checking 15%
Bommer Bros.:
Bommer Spring Hinges 40%
Bommer Ball Bear. Floor Hinges.40%
Chicago Spring Butt Co.:
Chicago.....20%
Floor Hinge.....40%
Garden City Engine House.....20%
Keene's Saloon Door 20%
Triple End.....40c
Hoffman Hinge & Foundry Co.:
No. 70 & 80 Holdback Detachable $9.00
Lawson Mfg. Co.:
Matchless.....30%
Matches Pivot.....35%
Payson Mfg. Co.:
Oblique.....50&10%
Stover Mfg. Co.:
Ideal, No. 16, Detachable, per gr. $12.50
Ideal, No. 4.....per gr. $9.00
New Idea No. 1.....per gr. $9.00
New Idea, Double Acting.....45%

WROUGHT IRON

Strapand T Hinges, list Mar. 15, 1901:
Light Strap Hinges.....75%
Heavy Strap Hinges.....50%
Light T Hinges.....70%
Heavy T Hinges.....66⅔%
Extra Heavy Hinges.....75&10%
Hinge Hasps.....60%
Cor, Heavy Strap.....80%
Cor. Ex. Heavy T.....75&10%
Screw Hook and Strap:
6 to 12 in.....lb. 3¼c
14 to 20 in.....lb. 3¼c
22 to 36 in.....lb. 3 c
Screw Hook and Eye:
¾ to 1 inch.....lb. 5c
⅝-inch.....lb. 6c
½-inch.....lb. 7c

MISCELLANEOUS—

Hoffman's Steel Spring Butt Hinges 40&10%
Hoffman's Offset Refrigerator Hinges 40&10%

HOLLOWWARE.

Stove Hollowware Ground.....50%
Maslin Kettles.....70&10%

HOOKS.

Picture, No. 290 ....&28c

BUSH HOOK.

No. 1, Underhill $9 00
Bird cage 40%
Clothes line .....60&10&10%
Grapling.....50%
Ceiling.....60&5%
Coat and Hat .....60&5%
Harness .....60&10&10%

WROUGHT IRON.

Cotton, V. & B.....25%
Tassel and picture.....50%
Wire, Coat and Hat, Gem.....net
Indestructible.....45%
Brass .....net $2 00%
Hooks and eyes, bright wire....80&10%
Brass.....60&10&5
Fish hooks, American.....50%

HOSE—RUBBER.

Competition.....dis 70&10%
Standard 70%
Extra 60%
N. Y. Rubber Co.'s st'd.....50&10%
Banner.....60%
Extra.....50%

IRONS—SAD AND POLISHING.

Mrs. Potts' No. 50.....70c
Mrs. Potts' No. 55.....70c
Mrs. Potts' No. 60.....90c
Mrs. Potts' No. 65..... 85c

KNIVES.

Standard List.....70&5%
Adjustable Handle.....25@33⅓%
Watrous.....30&10@40%
Cantelo's Folding.....25%
Improved Crown.....20%

KNOBS.

Base, 2½in. Birch Rubber tip ℔ gro.....$1 40
Door, Mineral.....℔ doz. 65c
Door, Por. Jap'd.....℔ doz. 75c

LADLES.

Reading.....Net
Sargent's.....Net

LANTERNS—TUBULAR.

No. 0 Berger's "Bail Lift," per doz. $9 50.....40&10%
No. 0, Berger's "Bail Lift," Galvanized, per doz. $10 50...40&10%
No. 2 Berger's "Bail Lift," per doz. $13 00.....40&10%
No. 2 Berger's "Cold Blast," per doz. $16 00.....40&10%
No. 0 Berger's Dash Board, Japaned. Plain Globe, per doz. $13 00.....40&10%
No. 0, Berger's Dash Board, Japanned, Bull's Eye, per doz. $13 50.....40&10%
No. 2, Berger's Dash Board, Japanned, Plain Globe, per doz. $17 00 .....40&10%
No. 2, Berger's Dash Board, Japanned, Bull's Eye, per doz. $17 50.....40&10%

BULL'S EYE POLICE.

2¾-in. flash light, per doz. $3 50@$3 75
3-in. flash light, per doz. ...4 00@ 4 25
4¾-in. regular, per doz.....3 50
3-in. regular, per doz.....3 57

LEMON SQUEEZERS.

Wood, Common, per gr., No. 0 $5 00; No. 1 $6 50; No. 2 $10 00.

Wood, Porcelain lined, No. 1.....per doz. $3 00@$3 50
Tinned Iron.....per doz. 1 25
Iron, Porcelain Lined, per doz.....3 25@ 3 50
Jenning's Star...per doz. 1 85@ 1 90
King.....per doz.

LOCKS.

Plate 33⅓%
Slaymaker-Barry Co.....30&35%
Sargent & Co.....40, 40&10%
Yale flat key.....net
L. & C, round key.....30&10%
Reading Harding Co.....40%
L. & C. flat key latches .....33&10%
Stearns' sliding door....net $15 00

CABINET.

Eagle.....33⅓%
Yale.....33⅓%
Eagle and Corbin trunk.....25%

PADLOCKS.

Wilcock's..... 70%
M. W. & Co..... 70%
Russell & Irwin 70%
Slaymaker Barry Co..... 40%
Bohannon's brass..... 30%
Yale.....net
Eagle 33⅓%
Eureka, Eagle Lock Co 40%
Corbin.....33⅓&10%

MALLETS.

Fiber Head Sterns.....30&10%
Hickory.....40%
Lignumvitæ .....40&40&10%
Tinners', Hickory and Applewood, per doz. .....75c@$1 50

MATTOCKS.

Regular list.....65&5%

MOWERS, LAWN.

Cheap.....all sizes.....2 25
Good.....all sizes, $2 50@$2 75
10 12 14 16-in
High Grade....4.25 4.50 4.75 5.00
Pennsylvania and Continental .....Net price
Genuine Philadelphia Mowers:
Styles M. S., C., K., T., N....70&10%
Style A, (all steel).....60&10%
Style E, Low Wheel.....60&10%
Style E., High Wheel.....70&10&5%
Drexel .....Net prices
Gold Coins.....Net prices
Dewey's.....Net prices
All Day .....Net prices
XX, 12-in. wheel.....60%
Clippers..... .....50&10&10%

NAIL SETS.

Octagon..... per gross, $8 00@$9 00
Round..... per gross, 8 00@ 9 00
Cannon's Diamond Point, per gross .....$9 00 Net

NUT CRACKERS.

Sargent's No. 12.....$1 50

OILERS.

Tin or Steel.....50%
Zinc..... .....50&10%
Malleable Hammers 35%
Malleable Hammers, old pat., same list .....Net

PADLOCKS.

Sargent Dog Collar 70%
Sargent Wrought Steel and Brass..80%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws..... 25
Blacksmiths'..... 40
P. S. & W..... 25

PIPE.

WROUGHT.

List February, 1898.
1¼ and under, plain.....50&2½
1½ and under, gal.....50&2½
1¼ and over, plain..... 50&2½
1½ and over, gal..... 50&2½
Boiler tubes..... 50&2½

PLANES.

Stanley Planes, new list.....20@25%
Standard Bailey Planes.....20@25%

PLIERS AND NIPPERS.

Swedish Side Cutting Pliers 40%
" End " " 40%
" Diagonal " " 40%
Halls Compound Nippers.....40%
U. D. F. & T. Co., all kinds.....Net

PLUMBS AND LEVELS.

Common.....75%
Stanley's Wooden, new list. 40%
Disston's.....70%

POCKET LEVELS.

Stanley's Common, new list.....40%

POACHERS.

Buffalo Steam Egg No. 1, per doz. $7 20. 50%

POLISH.

POLISH—METAL.

U. S. Metal Polish Paste, 3 oz. boxes, per dozen, 50c; per gr. $4.50; ½lb boxes, per doz. $1.25; 1 lb boxes, per doz.....$ 2 25
U. S. Liquid, 8 oz. cans, per doz. $1.25; per gr..... 12 00
Barkeepers' Friend Metal Polish, per doz. $1.75, per gr..... 18 00
Universal Paste, 3 oz. boxes.....60%
Burnishine Liquid 5 lb..... 16 00

POLISH—STOVE.

Dixon's .....per gross, $5 75
Dixon's Plumbago.....per lb 6½c

POPPERS, CORN.

Round or Square, 1 qt.....per doz., 65
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 00

POST HOLE AUGERS AND DIGGERS.

Iwan's Patent Post Hole Auger....40%
Eureka Perfection Post Hole Digger, per doz.....$10 00
Atlas, per doz..... .... 7 50

POWDER.

IN CANISTERS.

Duck, 1 lb each.....45c
Fine Sporting, 1 lb each.....75c
Rifle, 1 lb each..... ....$1 00

IN KEGS.

Duck, 6¼ lb kegs.....$2 50
Rifle, 6¼ lb kegs..... ..... 1 25
Rifle, 12½ lb kegs..... 2 25
Rifle, 25 lb kegs 4 00

PRESSES—FRUIT AND JELLY

Enterprise Manufacturing Co.....25%

PULLEYS.

Hay Fork, Svl, Sd Eye, doz $1 75@$2 75
Hot House, Awning, etc.....50%
Japanned Clothes Line.....50%
Japanned Screw.....50&10%
Japanned Side..... .....50&10%
Sash (Auger Mortise):
Common Sense, 1¾ in ..per doz. 19c
Common Sense, 2 in .... per doz. 20c
Empire.... ....17c.; 2 in., 22c

SASH PULLEYS.

Fox No. 3 or No. 7, 2½ wheel, ...25c per doz
Fox No. 9, 1¾ wheel.....20c per doz
Extra for plated Finish... 25c per doz
Extra for Anti-Friction Bronze Bushing.....10c per doz

RAZORS.

Fox Razors No. 42....per doz. $20
" " " 44.... " " 24 00
" " " 82..Platina " 24 00
Discount 40%
Rantankarus..... "

REGISTERS.

List Sept. 1, 1901.

Black Japanned Registers, Ventilators, Faces and Borders, ...70%
White Japanned Registers, Ventilators and Faces.....70%
Bronzed Finishes in Imitation of Gold, Silver, Copper or Bronze .....40&10%
Nickelplated .....50&10%
Electro-Plated in Brass, Bronze, Copper or Oxidized Silver 40&10%
White Porcelain.....40&10%
Solid Brass and Bronze Metal .....40&10%

All on new list.

RIVETS AND BURRS.

Coppered Iron Rivets.....60&5%
Tinners Rivets.....60&5%

ROOFING SUPPLIES.

EAVE TROUGH.

"Perfection" Galvanized Eave Trough.....75&10%&10%
"Eclipse" Galvanized Eave Trough.....75&10%&10%
Double Bead Galvanized Slip Joint Eave Trough.....75&10%&10%
Double Bead Galvanized Lap Joint Eave Trough.....75&10%&10%

GUTTERS.

Roof Gutters, Galvanized.75&10%&10%

PIPE.

Plain Round Pipe, Galvanized, Nested.....70-5-10%
Plain Round Pipe, Galvanized, Unnested.....70-2½-10-%

VALLEYS.

Valleys, in Rolls, IC and IX Terne.70%
Valleys, in Sheets, IC and IX Terne.....70%

HOOKS.

Flashing Hooks.....10%
Wrought Conductor Hooks.....60%

CUT-OFFS.

Kuehn's Galv.....50%
Acme Galv.....10&10%
Acme Tin.....60&10%
Centennial Tin, new list.....50%

EAVE TROUGH HANGERS.

Eave Trough Hangers, Single and Double Bead, Imperial.....15%
Eave Trough Hangers, Single and Double Bead, Wire.....20%

ELBOWS.

One Piece Conductor Elbows, Galvanized, Corrugated..... 60%
Adjustable Elbows, Tin. 50%

PREPARED ROOFINGS.

Imperial 2-ply Tarred Roofing complete.....$1 75 per sq.
Imperial 3-ply Tarred Roofing, complete.....$2 00 per sq.

ROPE.

Per lb
Manilla, 7-16 inch diameter and larger..... 9½@10c "
Manilla, ⅜ in.....9¼@9¾c "
Manilla, ¼ and 5-16 in..... 10¼@10¾c "
Sisal, 7-16 in. and larger 7@7¼c "
Sisal ⅜ inch .....8@8¼c "
Sisal, ¼ and 5-16 in.....8@8¼c "
Sisal, Medium Lath Yarn ... 9@9½c "

SASH CORD.

Braided, Drab.....lb 25c
Braided, White, common.....lb 19c
Cable Laid Italian ....lb, A 18c, B 16c
Common India.....lb 9c@9½c
Cotton Sash Cord, twisted....12@16c
Patent Russia.....lb 12½@13c
Cable Laid Russia.....lb 13½@14c
India Hemp, braided.....lb 14@15c
India Hemp, twisted.....lb 10@12c
Patent India, twisted.....lb 10@12c
Pearl Braided, cotton .....lb 17@18c
Massachusetts, white.....lb 22½c
Massachusetts, drab.....lb 20½c
Eddystone Braided, cotton ....lb 19c
Harmony Cable Laid Italian....lb 18c
Ossawan Mills:
Crown, Solid Braided, white ..lb 18c
Braided, Giant, white.....lb 17c
Peerless:
Cable Laid Italian.....16c
Cable Laid Russian.....14c
Cable Laid India.....12c
Braided India.....18c
Phœnix, white.....19c
Samson:
Braided, Drab Cotton .....lb 32½c
Braided Italian Hemp.....lb 32½c
Braided, Linen.....lb 49c
Braided, White Cotton, Spot.lb.28½c
Silver Lake:
A quality, Drab, 40c.....15%
A quality, White, 35c.....15%
B quality, Drab, 35c.....15%
B quality, White, 30c.....15%
Italian Hemp, 40c.....15%
Linen, 57½c.....15%

SASH LOCKS.

Ives, Patent.....60@40&5%
Harlew's Burglar-Proof Ventilating.....Net
Payson's Perfect.....Net
Payson's Signal (new list).....Net

SAWS.

Atkins' Circular.....Net
Atkins' Band.....Net
Atkins' Cross Cuts.....Net
Atkins' Mulay, Mill and Drag.....40%
Atkins' One-Man Saw.....Net
Atkins' Circular Solid and Inserted Tooth.....50%
Atkins' Bands over 2 in. wide.....60%
Atkins' Bands under 2 in. wide.57&10%
Atkins' Mill, Mulay and Drag.... 50%
Atkins' Cross Cuts.....40%
Atkins' One Man.....40&10%
Atkins' Narrow Cross Cuts.....40%
Atkins' Wood Saws and Blades.40&10%
Atkins' Hand Saws.....40%
Atkins' Compass Saws.....50%
Atkins' Butcher Saws.....40&10%
Disston Circular Solid and Inserted Tooth.....50%
Disston Cross Cuts.....Net
Disston Narrow Cross Cuts.....Net
Disston, Mulay, Mill and Drag....40%
Disston Framed Woodsaws.....35%
Disston Woodsaw Blades.....40%
Disston Woodsaw Rods.....25%
Disston Handsaws, Nos. 12, 99, 9, 16, D100, D8, 120, 76, 77, 8.....25%
Disston Hand Saws, Nos. 7, 3.....30%
Disston Compass, Keyhole, etc....25%
Disston Butcher Saws and Blades.35%

SAW FILERS

Stearns'.....25%
Silent saw.....35%
Sargent's.....60&30%
Reading.....37½%

SCALES.

Family, Turnbull's .....30@20&10%
Hatch, Counter:
Platform, 4 lb. by ⅛ oz..doz...$5.75
2 Platforms, 8 lb. by ⅛ oz. doz $16 00
Union Platform, Plain.....$1.75@$2.00
Union Platform, Striped..$1.85@$2 15
Chatillon's Eureka.....25%
Chattilon's Favorite.....40%
Chatillon's Grocers' Trip Scales ..50%
Pelouze Scales, Household Counter, Confect. Postal, Ice, &c.....50%
"The Standard" Portables.....45%
"The Standard" R. R. and Wagon 50%

SCREWS.

BENCH AND HAND.

Bench, Iron.....per doz. 60%
Bench, Wood, Beech..per doz. $3 50
Hand, Wood.....30%

COACH, LAG AND HAND RAIL.

Coach and Lag, Gimlet Point, list Sept. 20, 1899.....75@75&10%
Hand Rail, list Jan. 1, 1871.....75%

JACK SCREWS.

ack Screws.....7

WOOD.

MANUFACTURERS' CIRCULAR PRICES

New List.
Flat Head Iron.....90&5%
Round and Oval Head Iron.....85%
Flat Head Brass.....85%
Round and Oval Head Brass.....82½%
Flat Head Japanned.....82½%

SCYTHES.

Blood's.....$ 5 50
Clover..... 5 50
Grain Clipper, Blood's..... 10 50
Hollow Clip..... 5 50
Silver Clip..... 5 50
Honest Dutchman..... 5 50

SHEARS.

	7	8	9 in.
Best.....	$16.00	$18.00	$20.00 gro.
Good.....	13.00	15.00	17.00 gro.
Cheap....	5.00	6.00	7.00 gro.

Straight Trimmers, &c.:
Best Quality Jap.....70@70&10%
" Nickel.....60@60&10%
Fair qual. Jap.....80@80&5%
" Nickel .....75@75&10%
Tailors' Shears.....40@40&10%
Acme Cast Shears.....40@40&5%
Heinisch's Tailors' Shears. 40@40&5%
Wilkinson's Hedge 50%
Wilkinson's Sheep.....1900 list, 50%

SHINGLES, METALLIC.

Eastlake I. C. Tin Shingles, painted, pr sq.....$4 25
Eastlake I. C. Tin Shingles, galvanized, pr square.....$6 00
Octagon Fluted I. C. Tin Shingles, painted, per square..$5 50
Octagon Fluted I. C. Tin Shingles, galvanized, pr sq....$7 25

SIFTERS.

Eclipse.....per gr $15 00
Hunter's Genuine.....per gr $16 00

SKATE SHARPENERS.

Skate Sharp., Eureka, per doz $2 00 net
Washer Cutters, Woodard's, per doz.....$2 50 net

SLATE.

GENUINE NO. 1 BANGOR.

24x14, 24x12, 12x 8	$3 50 pr sq.	20x10, 18x10, 18x 9, 16x 8	$4 50 pr sq
22x11, 20x12, 18x12, 16x12, 14x10, 14x 8, 14x 7	$3 75 per sq.	16x10, 16x 9	$4 25 pr sq
		12x 7, 12x 6	$3 25 pr sq

GENUINE NO. 1 BANGOR RIBBON.

24x14, 24x12, 22x11, 20x12, 14x 8, 14x 7	$3 00 pr sq.	20x10, 18x10, 18x 9, 16x10, 16x 8	$3 50 pr sq
	$3 25 pr sq.		

SNAPS.

German.....40@40&10%
Covert Mfg. Co.:
Derby.....35&2%
High Grade.....45@2%
Jockey.....40&2%
Trojan.....45&2%
Yankee.....35&2%
Yankee, Roller.....30&2%
Covert's Saddlery Works:
Banner.....60&10%
Crown.....60&10%
Model.....60&10%
Triumph.....60&10%
W. & E. T. Fitch Co.:
Bristol.....40&10%
Empire.....50&5%
German.....40%
National.....50&5%
Perfect.....45%
Clipper.....50&5%
Champion.....40%
Security.....40%
Victor.....60&5%
Oneida Community:
Solid Steel.....65@65&10%
Solid Swivel.....65&10@65&10&10%
Sargent's Patent Guarded...66⅔&10%

SOLDERING FURNACES.

No. 3 Gems tin reservoir.....$6 00
No. 6 Gems copper reservoir..... 8 50
Gem Gas Pots..... 3 25
Clayton & Lambert No. 1 Fire-Pot 6 00
Clayton & Lambert's Special Fire-Pot..... 4 50

SPRINGS, DOOR.

Star (Coil) list Oct. '95.....net
Torrey's Rod 39 in. Per doz. .....$1 20@$1 25
Warner's No. 1.....net 75

SQUARES.

Steel and iron.....70&10%
Nickel plated.....70&10%
Try squares and bevels.....60&10%
Disston's.....70%
Bemis and Call, pocket.....30%
Winterbottom's try & mitre.....30%
Starrett's.....25%
Stanley's Rosewood Handled, T., new list.....33⅓%

STAPLES.

Barbed Blind .....per lb., 10c
Poultry Netting.....per lb., 5c

STAPLE PULLERS.

Russell Staple Pullers..per doz., $9 00

STOVE PUTTY.

1, 10 & 25 pound Cans.....per lb., 5c
500 pound Kegs.....per lb., 4½c

STROPS.

RAZOR.

Emerson.....60 to 60&5%
Imitation.....20, 10&5%
Torrey's.....20%
Tower & Lamont.....per doz $4 00
04 Combination.....per doz 3 75

TACKS.

List Jan. 15, '99.
Carpet Tacks, American.....90&10%
American Cut Tacks.....90&10%
Swedes Iron Tacks.....90&20%
Swedes Upholsterers' Tacks.....90&20%
Gimp Tacks .....90&20%
Lace Tacks .....90&20%
Trimmers' Tacks.....90&20%
Looking Glass Tacks .....70&10%
Bill Posters' and Railroad Tack90&10%
Hungarian Nails.....80%
Common and Patent Brads....80&10%
Trunk and Clout Nails.....75&10%

TRAPS.

GAME.

Oneida Pattern .....75&5@75&10&5%
Newhouse .....45@50%
Hawley & Norton.....65@5&70%
Victor (Oneida Pattern) ....75@75&10%
Star (Blake Pattern) ....65&10@70&5%

MOUSE AND RAT.

Mouse, Wood, Choker, doz. holes 10c
Mouse, Round or Square Wire, doz.....$0.85@1.00
American Pattern French Rat and Mouse Traps—
No. 1, Detroit Marty Pattern, per doz. $4.50; in ½ gro. lots, per doz $4.00
No. 2, Detroit Marty Pattern, per doz, $3.25; in ½ gro. lots, per doz.....$3.00
Detroit Marty Pattern Mouse, per doz. $2.00; in ½ gro. lots, per doz.....$1.75
Diamond Joe Mouse Traps, per doz.....60c
Diamond Joe Rat Traps, per doz.$1.00
Marty French Rat and Mouse Traps. (Genuine:)

TWINE.

Flax Twine—	BC	B
No. 9, ¼ and ½ lb. Balls...	20c	24c
No. 12, ¼ and ½ lb. Balls ...	17c	20c
No. 18, ¼ and ½ lb. Balls ...	14c	17c
No. 24, ¼ and ½ lb. Balls....	14c	17c
No. 36, ¼ and ½ lb. Balls...	13c	16c

Chalk Line, Cotton, ½ lb. Balls18@20c
Cotton Wrap., 5 lb. Balls to lb 16 to 20c
2-Ply Hemp, 1½ lb. Balls (Spring Twine) .....12@15c
3-Ply Hemp, 1 lb. Balls.....12@15c
3-Ply Hemp, 1½ lb. Balls .....
2, 3, 4 and 5-Ply Jute, ½ lb. Balls....8c
Mason Line Linen, ½ lb. Balls 45c
No. 264 Mattress, ¼ and ½ lb. Balls 24c
Wool.....5½@6c

VISES.

Solid boxes.....40%
Parker's.....20%
Howard's.....35%
Bonney's.....35%
Trenton.....40%
Stearns'.....50%
Cheney's.....12½%
Massey's.....25%
Parallel.....30&5%
Holland's.....35%
Stevens'.....25%
Miller's Falls.....40%
Prentiss.....20%
No. 1, Rat each $1.12½; per doz. $12.00
No. 3, Rat, per doz $5.00; case of 50.....$5.25 doz.
No. 3½, Rat, per doz $4.75; case of 72.....$4.25 doz.
No. 4, Mouse, per doz. $3.50; case of 72.....$2.75 doz
No. 5, Mouse, per doz. $2.75, case of 72.....$2.25 doz.
Schuyler's Rat Killer, No. 1, per gro. $30.00; No. 2, per gro. $30.00; Mouse, No. 3, $18.00.....50%

FLY.

Balloon, Globe or Acme..... doz $1.15@1.25; gro. ... $10.50@11.00
Harper, Champion or Paragon.... doz. $1.25@1.40; gro....$12.00@12.50

TROWELS.

Disston Brick and Pointing 30%
Disston Plastering.....25%
Disston "Standard Brand" and Garden Trowels.....40%
Never-Break Steel Garden Trowels.....gro. $7.00
Peace's Plastering.....30%
Rose Brick and Plastering.....25&5%
Woodrough & McParlin Pl'st'ring.

WASHERS.

LEATHER, AXLE—

Solid.....80&10&10@85%
Patent.....85&10@85&20%
Coil: ⅜ 18c, 1 19c, 1¼ 20c, 1¼ inch. 23c per 100

IRON OR STEEL.

Size bolt	5-16	⅜	½	⅝	¾
Washers	$5.20	$4.30	$3.00	$2.80	$2.60

In lots less than one keg add ¼c per lb; 5-lb boxes add ⅛c to list.

CAST WASHERS.

Over ⅜ inch, barrel lots per lb .....1⅛@1¼c

WELL WHEELS.

8-in., $2.20.....10-in., $2.60
12-in., $3.25.....14-in., $3.25

WIRE AND WIRE GOODS.

Brt. and Ann., 6 to 9, 70&10@70&10&5%
Brt. and Ann., 10 to 18, 72½@72½&10%
Brt. and Ann., 19 to 26, 75&7½@75&10%
Brt. and Ann., 27 to 36,.....75&10&5@75&10&7½%
Cop'd and Galv., 6 to 9, ...70@70&10%
Cop'd and Galv., 10 to 18,..... 70&10@70&10&5%
Cop'd and Galv., 19 to 26..... 75&7½@75&10%
Cop'd and Galv., 27 to 36,..... 75&10@75&10&5%
Tinned, 6 to 14.....75@75&5%
Tinned, 15 to 18 .....70&5@70&10%
Tinned, 19 to 26.....70@70&5%
Tinned, 27 to 36.....65&10@70%
Annealed Wire on Spools..... 70&5@70&10%
Brass and Copper Wire on Spools .....50&10%
Brass, list Feb. 26, '96.....25%
Copper, list Feb. 26, '96.....15%
Cast Steel Wire.....50%
Stubs' Steel Wire, $6.00 to £.....40%

BRIGHT WIRE GOODS.

List April 1, 1901.....80&20%

WIRE CLOTH AND NETTING.

Galvanized Wire Netting.....80&20%
Ptd Screen Cloth per 100 ft.....$1.10
Light Hardware Grade:
2-8 Mesh, Plain (8c list) sq ft....1⅛c
2-8 Mesh, Galv. (8c list) sq ft....2⅛c

WRENCHES.

Agricultural.....70&10%
Case lots.....75&10%
Acme.....60&5%
Baxter's S.....60&10%
Bull Dog.....70%
Coe's Genuine.....40&10&5%
Coe's "Mechanic's"..40&10&10&5&5%
Alligator.....60&10&10%
Bemis & Call's:
Adjustable S.....35&5%
Adjustable S Pipe.....40%
Briggs' Pattern.....80&10%
Combination Black.....40&5%
Combination Bright.....40%
Cylinder or Gas Pipe.....55%
Extra Heavy.....45%
Merrick's Pattern.....50%
No. 3 Pipe, Bright.....55%
Bindley Automatic.....30%
Boardman's.....33⅓%
Donohue's Engineer.....40&10%
Eagle.....50&10%
Gem Pocket.....30%
Hercules.....70%
Knife Handle, Machinists' (W & B.): 0&10%
Case lots.....50&5%
Less than case lots.....0%
Improved Pipe (W. & B.).....50&10
lid Handles, P. S. & W.....&10 &
Soveenson..... 100

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W. Washington, D. C. Consulting Expert in Patent Causes, U.S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—Hardware and Lumber; located at small station in good farming country, Eastern Illinois. Dwelling and store side by side; buildings and lots, nineteen hundred; stock invoices between three and four thousand; good reason for selling. Address, Box Twelve, Jamesburg, Ill. 3

I Have 160 Acres Improved Farm—Turner Co., S. D. to exchange for good hardware stock. Address "K. F.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

For Sale—Our hardware stock; requires about $4,000.00. Best location in the city and one of the best cities in the state. Nothing the matter with us or our business, we simply want to quit. Rodney Sacket & Co., Berlin, Wis. 3

Wanted—Good side lines, by Mfg. Agents. To introduce in Chicago and State of Illinois. For particulars, address "Introduce," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

For Sale—1 Beading Machine with stand, takes No. 10 work, and 1 pair No. 2 O. G. Rollers, good as new, has not done 10 days work. Address, C. F. Link, Frankersmith, Mich. 3

For Sale—A good, clean stock of hardware, stoves and tinware; in a live town in Northern Indiana of about 6,000 inhabitants; stock will invoice about $3,000. Address, A. E. Starr and Son, Valparaiso, Ind. 3

Wanted—To buy an up-to-date hardware and tin shop in a good, lively town or city. Have $2,000 or $3,000 to invest; must have up-to-date stock; give full particulars, and amount of sales of 1901. Address "S. D.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

For Sale—General store in best farming country in Southern Minnesota; in a thriving village of 250 inhabitants; store 26x70, one story, and good dwelling on same lot; good reason for selling. Address "Farming," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

For Sale—Splendid hardware and implement business, tin shop in connection; good live town 6,000. Might consider some good land on same. Address "Consider," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

For Sale—Half or whole of hardware, plumbing, pumps and windmill business; in city of 5,000 population, in North Central part of Wisconsin—Horses, wagons, etc., or not. Entire business invoices about $6,000. Address "Rare Chance," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

For Sale—Stock of hardware, stoves, tinware, etc.; in one of the best towns in Southern Wis.; tin-shop in connection; stock will invoice 1200 to 1500 dollars. Address "Invoice," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Hardware stock in live town; about $2,000. Would consider taking active partner; have business ability; am tinner, and up-to-date in heating work; give particulars. Address "Box Act," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—To buy a good paying hardward business, from $2,000 to $3,500. In town of from 500 or more inhabitants, with good territory. Give amount of business, size of stock and class of people, size of store and rent. Enclose stamped envelope for reply. Address, B. A. H., Rockwell City, Iowa. 2

Do You Want to Retire and Exchange Your Hardware—For a beautiful suburban home of 13 acres, adjoining a live Iowa town of 2,000 people. Highly improved house of 10 rooms, remodeled last fall, heated by furnace; place about half in fruit; cost owner last year $4,200; will put in on a cash deal $3,500; this is a rare chance. I can handle a stock up to $7,000. Address "Retire," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—A partner in the manufacturing of wire goods; viz.: rat and mouse traps, flue stop holders and stove pipe holders. I have the tools and patents; or would sell the business. J. B. Davis, Abingdon, Ill. 2

Wanted to Buy—An established hardware in live Iowa county seat town 4,000 to 7,000; give full particulars in first letter, as to town, stock, annual sales and competition. Address "Particulars," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

320 Acres Unimproved Land—Clear; in Gove Co., Kansas, 3 miles from county seat; value $3,200, to trade for hardware stock of not over $3,500. Address "Mills," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

For Sale—A new stock of hardware, stoves and tinware; in Northern Illinois; tin shop in connection, will invoice about $2,700. Doing fine business. Best reasons for selling. Cheap rent. Address "P. & S.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 1

For Sale—My stock of hardware and implements; will invoice about $3,000; it is all new and in good condition. Good reason for selling. Address, E. W. Putman, Henning, Ill. 1

For Sale—Tin shop in good town of 1000 inhabitants in Northern Indiana; only shop in town. Will sell cheap for cash if taken at once. Address, S. L. Prickett, Milford, Ind. 1

Wanted—Hardware store and tin shop. Address "M. M.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 1

For Sale—Clean stock of hardware. In thriving city of over 30,000 inhabitants. A lake port where there is a large amount of labor employed at good wages. One concern paying for labor over ten thousand a week. But little competition. Three other hardware stores, and all agreeable to make money. Reason for selling, old age and wish to retire. Would take a young man that is a tinner as partner that had a prospect of buying entire stock in a few years. Stock invoice seven to eight thousand dollars. Address "Sale Business," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

For Sale—Clean and up-to-date stock of hardware and implements. In one of the best county seat towns in south-eastern South Dakota. Population 1500. Gas light, waterworks, telephone system, good schools, etc. Stock will invoice about $4,500. Will sell with or without building. This will bear investigating. Best of reasons for selling. Address "637," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

I Have 140 acres improved land in Wayne Co., Ill, 10 acres orchard, 25 acres fine, unculled timber, 20 acres pasture, 52 acres meadow, 25 acres corn land and 8 acres yard, barn-yard, truck patch, etc., fair frame house and good barn. Incumbrance $1,500, can run ten years @ 6% if desired. Price $45.00 per acre. Will exchange equity for good, clean stock of hardware. F. A. Clausen, Garrett, Illinois. 25

For Sale—A new, clean stock of hardware, stoves and tinware, in a good town of about 7,000 inhabitants; stock will invoice about $3,000. In Northern Illinois. Address "Stoves," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 25

For Sale—A leading general store, situated in one of the most prosperous farming districts in Iowa, desires to sell their stock of hardware and tinners' tools to ambitious, young or middle age man. Stock will invoice $2,000. We have a fine class of trade with exceptionally small losses from bad debts. This is a good opportunity for a German as half of the population in this county are of that nationality. Address "Good Thing," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 25

For Sale or Trade—Full or part, set of tinner's tools and machines, all in very fair condition. R. Z. Tracy, Irving Park Station, Chicago, Ill. 24

For Sale—Tin shop, furnace and plumbing business; pumps and well supplies, fine room for storing stoves together with a 3 years' lease of the building, and rent cheap; only one in town of 1800—about 35 miles from Chicago, in Indiana. Good reason for selling, at a bargain. Address, Box 158, Hobart, Indiana. 24

For Sale—Hardware Stock and Building; (total value $10,000 00), in South Central Minn. Last year's sales $20,000.00. This is a big chance for your future; can reduce stock to suit. May consider a land trade for building. For further information address "Box In," care of THE AMERIAN ARTISAN, 69 Dearborn St. Chicago, Ill 24

TINNERS' TOOLS.

Wanted—Second hand tools as follow, cheap for cash; 30 in. square shears, 3½ or 4 in. Parker Pivot Vise, 1 setting down machine, No. 4 Beading machine. Must be in good condition and cheap for cash. Address Grant Stricker, 36 Bedford St., Battle Creek, Mich 3

For Sale—Tinner's tools, pump tools and a lot of stove trucks; write for list and price. J. P. Klassen, Greenville, Iowa. 3

For Sale—1 complete set of tinner's tools of latest pattern including square shears; write for list and price. 201 2nd St., Cedar Falls, Ia. 2

Wanted—A second hand cornice brake, 8 or 10 feet. State best cash price and make. Address F. C. Hunt & Co., St. Charles, Ill.

For Sale—A No. 4½ Barnes' Screw Cutting Lathe, complete with tools and chuck, etc., $35.00 (thirty-five), cash buys this machine. Wm. Matt Fort Dodge, Ia. 1

For Sale—Second-hand World cash register in good order. Write for price. Mann & Co., Pierson, Ia. 26

Wanted—A 2nd-hand pipe tapping machine. Send me prices and description. C. A. Bergh, Mondovi, Wis. 25

For Sale—One complete set tinner's tools, including 1 4 foot brake; all the tools that could be used in a first class shop. Address "Tools," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 25

HELP WANTED.

Wanted—Side line; for my men to handle on commission; I have men traveling all over the State. O. A. Rudolph, Canton, S. D. 3

Tinners Wanted—All inside work; must be experienced and steady. The Arras Cream Separator Co., Bluffton, O. 3

Wanted—A thoroughly competent man for Superintendent for a Steel and Gas Range Plant. Must have had experience and come well recommended. Address "Plant," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

Wanted—6 stove pattern makers, 1 first class carver; 33⅓ cts. per hour paid. Mersfelder Pattern Works, Cincinnati, O. 3

Wanted—A competent young man; who can take management of a plumbing and steam heating business or will buy an interest in it. Address, O. A. Rudolph, Canton, S. D. 3

Wanted—A first-class, experienced and intelligent salesman for the stove and house furnishing trade in Wisconsin and Minnesota; good proposition. All correspondence confidential. Address, A. J. Lindemann & Hoverson Co., Milwaukee, Wis. 3

Wanted—Cornice maker, competent to cut out work, make drawings and estimates. Also competent galvanized iron stock tank maker. Address with reference, Gedge Bros. Iron Roofing Co., Anderson, Ind. 3

Wanted—By March 1st, a good tinner and furnace man; would like a man that has some knowledge of plumbing and bicycle work. Good wages and steady work to a reliable man. Rodney & Monk, Humeston, Iowa. 3

I Want a Young Man—German preferred, unmarried; who has had from two to three years' experience at the tinners' trade, to make himself generally useful around a hardware store when not busy at the tin business. His wages to increase as he improves in workmanship and knowledge. Wm. B. Frymire, Bloomfield, Neb. 3

Wanted—Good all-around man; one who is a good tinner, furnace man and plumber; strictly temperate, no other need apply. Address "Other," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

Wanted—At once a good, live young man; one who can work in tin shop, and good salesman in store, one who is not afraid of work; must be strictly sober and honest; steady job to right man. Address, lock box 1516, Anita, Iowa. 2

Wanted—A tinner, must be a mechanic; wages $2.50 per day; steady work. Address, Fowler & Wolfe, 216 Court St., Paducah, Ky. 2

Wanted—An all around man for our shop; one thoroughly capable of making cornices, sky-lights and setting of furnaces; must also be a practical gravel roofer, and capable of making any patterns necessary for all kinds of work coming into a tin shop. For a reliable man that can handle our work steady employment will be given. Barnes & Voss Co., Grand Forks, N. D. 2

Wanted—We are in need of a good, sober, all-around tinner and plumber, at once. Good wages and steady work the year around. Anyone in need of a position and can fill the above requirements, please write us immediately. Peter & Harvey, Manteno, Ill. 2

Wanted—Addresses of makers of some automatic, one piece, stove pipe elbow machinery. Address "Manufacturer," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Experienced foreman of good mechanical ability; for a nested stove pipe factory. Address "Manufacturer," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—At once, a good A No. 1 tinner; can do furnace, bicycle and pump work, and any work that comes along in a country tin shop; work all year, winter and summer; write to Columbus Hardware Co., Columbus, Wis. 1

Wanted—Stove Salesman. State age, experience and salary wanted. Danville Stove & Mfg. Co., Pittsburg, Pa. 1

Wanted—By Feb'y or March 1st, first class tinner and pump man; one preferred who has some knowledge of furnace work and bicycle repair work; would like man who speaks Danish language; must be a hustler and honest; steady job if suited; give references and state wages; address, H. A. Ebert, Alden, Minn. 1

Wanted—We are in need of a good, sober, all around tinner and plumber, at once. Good wages and steady work the year around. Anyone in need of a position and can fill the above requirements, please write us immediately. S Manley Bros., Harvard, Ill. 1

Wanted—Good house and sign painter and paper hanger. Must be sober and steady. State salary. Address Anton Popelar, Dodge, Neb. 26

Wanted—Competent man as superintendent of stove factory producing sheet steel and cast goods. Must be able to handle men and one who has good mechanical ideas. Address "Compete," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Wanted—Experienced clerk for general hardware store in south-eastern South Dakota. Norwegian or German preferred. Give reference and state wages wanted. Address Box "Exc," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Wanted—Good, sober, all-around tinner and plumber who can put up windmills and not afraid to work. Answer, stating wages expected. Newtson & Seaver, Hoopeston, Ill. 26

Wanted—Experienced and competent stove and range traveling salesman to sell the "Eclipse" line in Nebraska. Stock carried at Omaha. Address Eclipse Stove Co., Mansfield, O. 26

Good Tinner Wanted—One that understands plumbing, iron pipe, and has some knowledge of hot water and steam heating. Steady work for right man, must be a married man and sober, German preferred. Address "P. I.," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 25

Wanted—Experienced Stove Salesman for Northern Illinois. Send References; apply by letter. Bergstrom Bros. & Co., Neenah, Wis. 25

Wanted—By Jan. 1, 1902, a first class tinner and clerk; good, steady job at good wages; must be honest, sober, industrious; would like him to understand pumps and plumbing; give references and wages. Thos. Rawlings, Wakefield. Neb. 25

Wanted—Two Salesmen, one for Michigan and one for Southern Indiana. In your application state your age, reference, amount of business you wrote in 1900 and 1901 and salary asked. Enterprise Stove Co., Vincennes, Ind. 24

SITUATIONS WANTED.

Situation Wanted—By a good all-around man; at in and outside work, understand pump, iron pipe work and all kinds of sheet metal work, windmill work, stove repairing, gun smithing, bicycle work, clerk in store if needed but would rather stay in shop. I would like a job in a town of 2,000 or 3,000 inhabitants, on or before the first of March, in Dakota or Minnesota; I am a single man, age 24; 8 years' experience at the tinner trade. W. W. Welton, Neptune, Wis. 3

Situation Wanted—By a tinner and cornice man; with knowledge of plumbing and pump work. First class on furnace work; good mechanic; reliable young man; strictly temperate; Swedish spoken; state wages you pay in first letter. John S. Nelson, care Gen. Delivery, St. Paul, Minn. 3

Position Wanted - An A. No. 1 all-around Tinner; married man, good habits, 30 years old; would like steady job at fair wages; good at cornice work, furnace work, pipe work, etc.; 15 years' experience. Address "Cornice Man," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 3

Situation Wanted—By a sheet metal worker and pattern draftsman; best of references given as to character and ability; position with cornice or blow pipe firm desired. Address, Henry A. Brown, 153 Federal St., Greenfield, Mass. 3

Situation Wanted—By a young man as tinner with 3½ years' experience at in and outside work; can repair bicycles, gasoline stoves, etc.; have some knowledge of furnace and iron pipe work. Address, Box 125, Wood Lake, Minn. 3

Situation Wanted—By first class tinner and plumber, A 1 mechanic; thoroughly understands steam and hot water heating, furnace work and all kinds of in and outside tin and sheet iron work; 11 years' experience, strictly sober and a hustler; can take entire charge of shop, and also owns a complete set of tools to carry on all above work; if you want a good man, write me. Address "Competent," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Situation Wanted—By young man 23 yrs. of age to finish learning tinner's trade; sober, and steady habits; and willing to do anything around store and shop. Have had three months' experience in shop and store; can make stove pipe and do repair work or put up spouting; have also had experience in setting up farm machinery. Northern Iowa or Southern Minnesota preferred, can give references if required. Address, Lock Box 368, Estherville, Iowa. 2

Position Wanted—As tinner; in nearly all its branches, both city and country. I am steady, sober and reliable, and can furnish good references from my present and past employers. Address, D. F., 247 East Erie Street, Chicago, Ill. 2

An Experienced Stove, Range and Furnace Traveler—With established trade and 6 years' acquaintance with hardware dealers in a Western State, wants position; has good record and habits. Would like to hear from some Co. or Mfg who needs a man. Address "Box M. R.," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 2

Wanted—A position as tinner, at once: have had 4 years' experience at in and outside work, can do furnace and bicycle work. Can give good references. Address P. O. Box 131, Lakefield, Minn. 1

Wanted—By man of 12 years' experience in the Hardware and Stove line, position with either wholesale or retail house after Jan. 1st. A 1 builders' hardware and stove salesmar; can furnish best of references. Address A. R., Station D., Detroit, Mich. 1

Wanted—Situation in a retail or wholesale hardware or stove business as clerk or salesman, by a hustling young man with experience; have made the stove business a specialty the past two years. Can furnish first class references from present employers. Ohio, Indiana or Illinois preferred. Address "Ambition," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 1

Situation Wanted—By a reliable young tinner with 12 years' experience at tinning and plumbing. Can plan and put up furnaces. First-class mechanic. Situation wanted west of Mississippi river. A. B. Curtis, care of Gen. Del., Sioux City, Ia. 26

Wanted—Position in hardware store. 5 years' experience; 2 years in tin shop. Prefer small town. Any part of country. Address J. O. Harney, Lawton, O. T. 26

Wanted—A position with a retail hardware and implement house at once. Have had 15 years' experience in the local trade and on the road. Can do tin work, pump work and some plumbing. Am honest, industrious and a No. 1 salesman. Address "M. O.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Wanted—By young married man, position in retail hardware; capable of taking entire charge experience, best references. Address, H. T. Cornell, care C. W. Hackett Hardware Co., St. Paul, Minn. 25

Wanted—A position as traveling salesman with a leading stove house, either city or country. Have a high record and wide acquaintance in city and suburbs. Understand gasoline and oil stoves thoroughly. A-1 references. Address "Energetic Man," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 25

Wanted—A man of 18 years' experience in the hardware line, desires a position either as traveling salesman or manufacturers' agent for a general line of stoves and furnaces, or a general line of hardware. Would like to sell on commission in Mich.; thoroughly reliable and can furnish best of references. Address K., 420 McCullum St., Bay City, Mich. 25

SPECIAL NOTICES.

For Sale Cheap.

THREE COPPER PLANISHING ROLLS,

6 ft. long, 22 in. diameter. Good condition.

LECLAIRE MFG. COMPANY,
Edwardsville, Ill. 3

FOR SALE.

Hardware business and good will of trade; long established. $9,000 to $10,000; town 50,000, central southern N. Y. On four trunk line railroads; is special opening for wholesale and retail business. Advantageous terms will be made with an immediate buyer. Address "Hardware Business," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 3

A RARE CHANCE

Owing to the necessity of a change of climate I am obliged to offer for sale my Hardware, Heating and Plumbing Business. This business is located in the best county seat town of 3,000 inhabitants in Northern Iowa. Fine farming country; farmers all prosperous; no failure of crops; creameries all over the county. Business is in highly prosperous condition; stock clean and up-to-date. The closest investigation invited. No trades considered. Further information furnished by

C. M. Doxsee, Algona, Iowa. 3

SPECIAL NOTICES.

Wanted

A leading steel range firm desire an A No. 1 pattern fitter. Address "M," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

Rare opportunity to purchase a profitable wholesale and retail hardware business; established twenty years; doing over $200,000 yearly. Reason for selling, ill health. This is positively the finest proposition ever offered in the West.

Odlum-Kurtzman Co., 26
Minneapolis, Minn.

Situation Wanted

By a first class heating engineer as hot water and furnace salesman, with a large trade established in Eastern Ohio and Western Pennsylvania, especially in Pittsburg and vicinity, with the very best first class references. Open for same Jan. 1st, 1902. Address "C. A.," in care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 24

WANTED.

Tinners to increase their means by soliciting subscriptions for THE AMERICAN ARTISAN. Liberal commission. Write for particulars to THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 23

Boiler and Heater Patterns Wanted.

We are in the market for a set of patterns to make Steam and Hot Water House Warming Boilers. They must be practical and in good condition. Address,

"Box 44,"

care of THE AMERICAN ARTISAN, Chicago, Ill. 23

MONTAGUE COHEN
39 PARADISE ST.,
LIVERPOOL, ENGLAND

Can accept the agency for a few lines of American manufacture in British Isles and Continental Europe. Will give prompt attention to same. Can furnish references. 16

KEELING & COPELAND, Volga City, Ia., write: "Please discontinue our advertisement in your tinners' tools column. We have disposed of the tools all O. K. THE AMERICAN ARTISAN is a great paper to advertise in."

DIXON'S SILICA GRAPHITE PAINT

FOR TIN OR SHINGLE ROOFS AND IRON WORK. Tin roofs well painted have not required repainting for 10 to 15 years.
IT IS ABSOLUTELY WITHOUT AN EQUAL.
If you need any paint it will pay you to send for circular.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

The No. 1 Fire Pot

$6.00 net.

has stood at the head of our line **for fourteen years**, and is to-day leading all other makes, making new friends everywhere, saving the user its cost in the saving of gasoline alone, and having many advantages which make it **the acknowledged King of Fire Pots.**

Are you using the No. 1? Our catalog is free. It's **worth dollars to you** and tells all about Fire Pots and Torches.

Clayton & Lambert Mfg. Co.

DETROIT, MICH., U. S. A.

"Kuehn's"

Patented.

Rain Water Cut-off

is made very strong and has a lever that cannot get out of order. **It will fit corrugated** pipe. There is a distinct saving of both labor and solder in applying it to the pipe.

La Crosse Steel Roofing & Corrugating Co.

LA CROSSE, WIS.

Willis Manufacturing Co.

Galesburg, Ill.,

For a copy of their NEW CATALOGUE (just issued) OF CORNICE ORNAMENTS AND STATUARY.

Also send in Architects' Details for Estimates.

GEROCKBROS. Mfg. Co.

1252 MANCHESTER AVE., ST. LOUIS, MO.

Zinc and Copper Ornaments. Steel Ceilings. Skylight and Ventilators.

Catalogue on application

John Selzer, Morning Sun, Iowa, writes: "Please discontinue my ad for Tinners tools, am supplied have received replies from all states from Virginia to Texas."

American Tin Plate Company

MANUFACTURERS . . . . .

Tin Plate

Terne Plate

. . . and . . .

Black Plate

GENERAL OFFICES: Battery Park Bldg. New York.

WILLIAMS & JOHNSON, Farmer City, Ill., write: . . . . . "Please take out our ad. for a tinner, as we are supplied. Have been literally snowed with replies and want the 'avalanche' stopped."

WHEN THE RAIN COMES

Conductor Pipe, Eaves Trough and Gutters can not be too good. We make them, and the styles, material and workmanship are all that can be desired.

Ever handle our Metal Ceiling and Side Walls? We manufacture Sheet Metal Goods of every description.

Write for catalogue of designs and prices.

The Canton Steel Roofing Company,
CANTON, OHIO.

New York Agency, 157 W. 23rd Street.

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PURITY IN SOLDER

Attracts the same admiration as purity in anything else. Our Solders are sold at their exact value—no misrepresentation. Value in Solder is better estimated in actual results than in dollars and cents.

Our brands are: Extra Fine. Warranted ½ and ½. Camaret Tinsmiths and Double Refined.

Accuracy in proportions.
Plumbers' Extra Wiping.
Triangular bar or drop capping bars.

Our Guarantee to be exactly as represented goes with every bar.

WRITE US FOR PRICES.

MERCHANT & CO., Inc.,
Manufacturers Solders, Babbits and All Other Mixed Metals.

PHILADELPHIA, NEW YORK, CHICAGO, BROOKLYN.

GARRY IRON & STEEL ROOFING COMPANY

CORRUGATED
ROOFING SIDING & CEILING
CLEVELAND OHIO.

FOR **MICA**

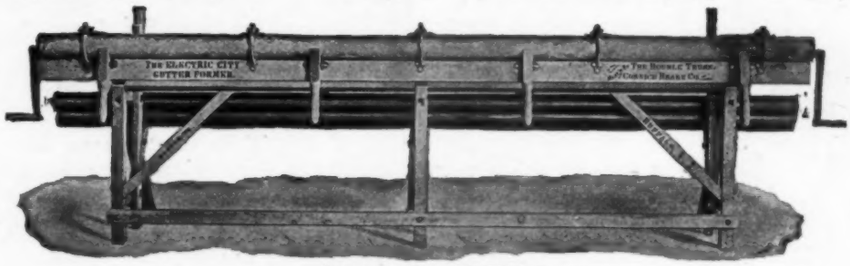
Sheet, cut or uncut, Powdered and Flake
WRITE TO
ASHEVILLE MICA CO.
ASHEVILLE, N. C.

PERFORATED METAL

THE ROBERT AITCHISON PERFORATED METAL CO. 300-302 DEARBORN STREET CHICAGO, ILL.

THE ELECTRIC CITY GUTTER FORMER.

New in Principle.



Mechanical in its Operation.

PATENTED JULY 30, 1901.

Price 50% less than other machines of equal capacity. See our "Mechanical Forcing Bar" before placing your order. Best device ever invented for forming long length gutters. Will pay for itself in a very short time.

We guarantee them to be exactly as represented in every way. Send for booklets illustrating and describing our Gutter Formers, and improved Cornice Brakes, with double edge on front leaf.

J. L. PERKINS & CO., 241 Lake Street, CHICAGO, Western Agents.

THE DOUBLE TRUSS CORNICE BRAKE CO., - - BUFFALO, N. Y.

WHAT THIS "BERGER'S Classik" MARK MEANS

METAL CEILINGS

It means Merit, Originality, Exclusiveness and Adaptability in Metal Ceilings.

"What's in a name? the bard of Avon asks
Haply unmindful of lifes lowlier tasks
A name fraught with power almost divine
And lesser ones are all eclipsed by them."

We took an advance position when we originated and put into practice the idea of producing metal ceilings in complete **"classified"** designs of famous artistic styles.

This advance position we have been holding ever since, and in keeping with the character of our goods we have adopted for them the above distinctive and appropriate name of **"Classik"** Metal Ceilings.

As a matter of course, the trade appreciates their value and superiority. Even competing manufacturers recognize the advantages of Berger's **"Classik"** Ceilings (although, of course, they can't be expected to admit it).

We grasped the idea placing Metal Ceilings on a correct artistic basis—we brought out a series of complete Classified Designs—("Berger's Classik" we have named them) and they took the lead.

In artistic harmony, character of stamping and variety of patterns offered they set the pace that others would like to follow.

For up-to-date Ceilings come to us.

The Berger Mfg. Co., Canton, OHIO.

BRANCHES:

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FIRE your orders at US

FOR

Coke Plates **Charcoal Bright Plates**
Terne Plates **Galvanized Iron**
Eaves Trough, Conductor, Roofing, Siding

We have a large stock and can make immediate shipment

ILLINOIS ROOFING & SUPPLY CO.

23 Lake Street, CHICAGO

The "Centennial" Rain-Water Cut-Off

The strongest, most durable and cheapest CUT-OFF on the market.

The only single Cut-Off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Patent applied for. Manufactured only by

COONEY & GEIGER,

19 & 21 E. South St., INDIANAPOLIS, IND.

Art Metal Ceilings

For Interior Decorations.

Write for Catalogue and Prices.
Estimates Furnished on Special Work.

SPECIALTIES: Steel Ceiling, Zinc and Copper Ornaments, Statuary in Bronze, Zinc and Copper, Crestings, Finials, Capitals, Galvanized Steel Horses for Merry-go-Rounds, Copper Plated Ceilings in Antique Finish, etc., etc.

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194-202 MATHER St. CHICAGO, ILL.

REPAIRS FOR ALL STOVES

Pipe Dampers, Mica, Stove Rods, Paste, Stove Putty, Stove Knobs, Etc.

Wm. T. Dust Co.,
231 Brush St., DETROIT.

STOVE, RANGE AND FURNACE REPAIRS OF ALL KINDS.

AMERICAN STOVE REPAIR WORKS,
186-188 West Seventh Street, ST. PAUL, MINN.

REPAIRS FOR ALL STOVES.

Great Western Stove Repair Co.
MINNEAPOLIS, - - - MINN.

REPAIRS FOR ALL STOVES AND RANGES.

A. G. Brauer, 316-318 North Third St., ST. LOUIS, MO.

Trade "M&M" Mark

The "M & M" 450 CANDLE POWER ARC LAMP

Trade "M&M" Mark

THE BEST IS THE CHEAPEST.

STORE LAMP. Patented.

Burns 12 to 15 hours with one filling. Diffuses more light than any electric arc. Does not affect your insurance policy. Permitted by all insurance companies. Absolutely non-explosive, odorless and smokeless. Tried, tested and used commercially for three years. Over 25,000 in practical use. One satisfied customer says:

Joliet, Ill., Mch. 22, 1901.
MARTIN & MOORHEAD,
54 W. Washington St.,
Chicago, Ill.

Gentlemen: We used six of these lamps last year and kept an accurate account of the expense. The gasoline cost us $25 and the chimneys and mantels $20.46 making a total cost of $45.46 for six lamps for a year. We believe we have just as good light as though we had had six electric arc lights, which would have cost us $360.

Yours respectfully,
BARRETT HARDWARE CO.

STREET LAMP. Patented.

There are others. We are saving light consumers thousands of dollars every month. We will furnish full particulars on request. Agents wanted in all unoccupied territory. Exclusive territory given. Our Pressure Mantles without an equal for use with any gasoline pressure light

Acorn Brass Works, DEPT. 4. **Chicago.**

DO YOU WANT **STOVES AND HEATERS** that are easily sold and STAY SOLD. We have been very successful in designing patterns for such.

The Gobeille Pattern Co.
CLEVELAND, OHIO.

PATTERNS
UP TO DATE
Wood and Metal for Stoves, Ranges and Furnaces to Order.
W. L. MERSFELDER,
400 East Pearl, CINCINNATI, O.

THE GEO. W. COPE STOVE PATTERN WORKS,
Randolph and Jitwater Sts.
DETROIT, MICH.

BIG FOUR ROUTE

Chicago to Indianapolis, Cincinnati, Louisville, the South and Southeast

Peoria, St. Louis, Indianapolis, Cincinnati, Louisville To **New York** AND **The East**

W. P. DEPPE, A. G. P. & T. A.
W. J. LYNCH, G. P. & T. A.
CINCINNATI.

J. C. TUCKER, G. N. A., 234 Clark St., Chicago

C. D. Holliday, Memphis, Tenn., writes: "I am lost without your valuable paper."

Black-Lists

is the way a witty hardware dealer referred to his repeated orders for various sized boxes of **Black Silk Stove Polish.** It certainly is black—the blackest ever. It is made of special ingredients under secret formulas and invariably gives satisfaction.

Lewis D. Wynn, Sterling, ILL.

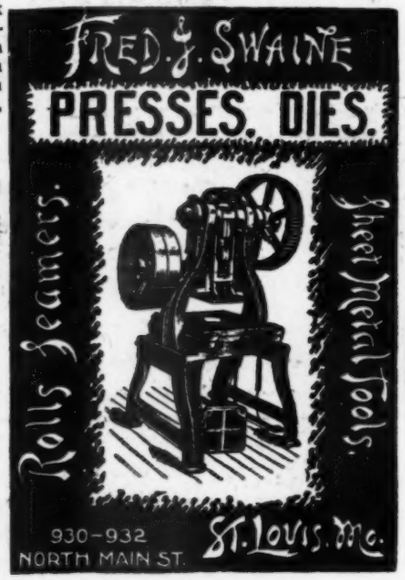
Buckeye Brand White Lead is ground in pure linseed oil. It is put up in 12½, 25, 50, 100 and 500 lb. kegs. Its merit is recognized by painters everywhere.

Buckeye Paint & Varnish Co.
TOLEDO, O.

SAMPLES SENT FREE TO STOVE DEALERS

This New Patent Prepared Dry Stove Polish—it Mixes Quicker—Shines Quick and Easy—Black and Brilliant Waterproof and Rustproof—Keeps any length of time—Never Spoils—Cheapest Polish in the Market—1 Box will do as much work as 15 lbs. of paste—Size of Box, 10½Lx8¼ Deep, 6 in. Wide.

Ayling Brothers,
Address Department A. 8-14 HADDON AVE., CHICAGO, ILL.



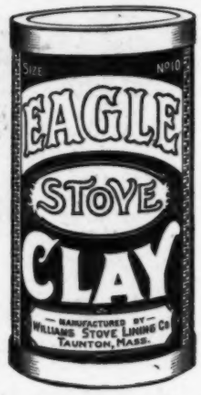
Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb., and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

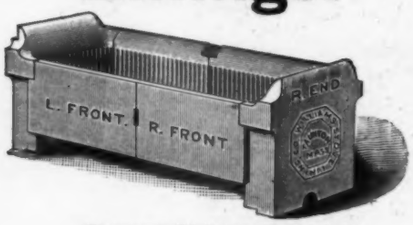
BRIDGEPORT CRUCIBLE CO.
BRIDGEPORT, CONN.

Incandescent Gas Fuel.

Prices and Samples Free by Mail.

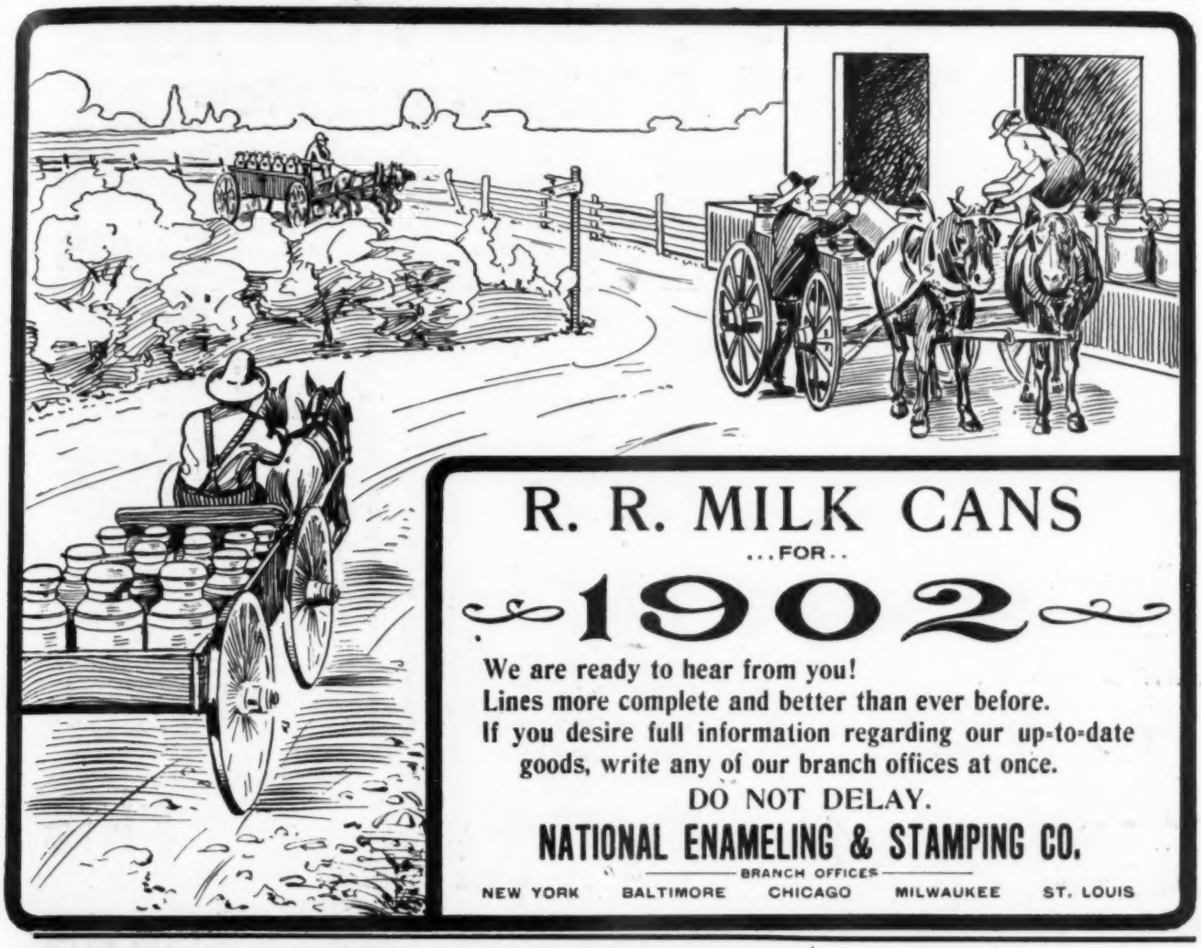


Brick Stove Linings.

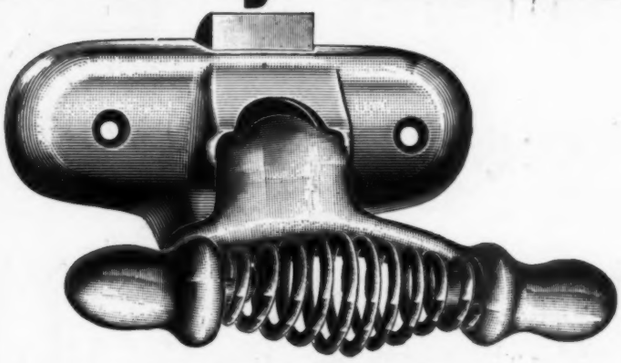


Prompt Shipment and Best Quality Guaranteed.

Williams Stove Lining Co., Taunton, Mass.



No. 7. **Range Gravity Handle.**



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The Fanner Manufacturing Co.,

CLEVELAND, OHIO.

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Paper Makers,

CHICAGO.

BUILDING,
WRAPPING,
WRITING,
NEWS,
BOOK

Paper

Send for Catalogue.

E. J. Schultz, Kewanee, Ill., writes:

"I can say that my advertisement in The American Artisan convinces me that I cannot afford to be without your paper."

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A few illustrations from the GREEN BOOK of Hardware Specialties.

OUR MOTTO:
The Recollection of Quality Remains Long After the Price is Forgotten.

Next Month We Will Show New Tools

Watch This Space

Smith & Hemenway Co.

Manufacturers of Hardware Specialties, **296 Broadway, NEW YORK,**

Thomson Bros. & Co.
Manufacturers of Seavey's Mitre Box.

Utica Drop Forge & Tool Co.
Manufacturers of largest line of Nippers and Pliers in the World.

ASK YOUR DEALER FOR THESE GOODS.

And Still His Whiskers Grew

Not if he used the Razors the **GREEN BOOK** of Hardware Specialties illustrates. Tumble?

Smith & Hemenway Co.
Manufacturers of Hardware Specialties,
UTICA DROP FORGE & TOOL CO.
Manufacturers of the largest line of Nippers and Pliers in the World.
THOMSON BROS. & CO.
Manufacturers of Seavey Mitre Box.
296 Broadway, - - NEW YORK CITY.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS **Sold by All Hardware Dealers**
NEW BRITAIN, CONN.

No other "Just as Good" as the

Enterprise Food Choppers

TINNED

Now made in TWO sizes

No. 100, chops 2 lbs. per minute, $1.50
No. 300, chops 3 lbs. per minute, $2.25

FOUR KNIVES WITH EACH MACHINE

Fine **Medium** **Coarse** **Nut Butter Cutter**

Order from your Jobber
Catalogue mailed Free

The **Enterprise Mfg. Co. of Pa.**
Philadelphia, U. S. A.

New York Branch, 10 Warren Street — San Francisco Branch, 105 Front Street

Disston's Superior Files

THE MATERIAL USED IN THE **Disston Files** IS MADE UNDER OUR PERSONAL SUPERVISION, IN OUR OWN STEEL WORKS. ALL **Disston Files** ARE MADE OF BEST QUALITY CRUCIBLE STEEL.

Disston Files ARE CAREFULLY FORGED AND HARDENED, TEETH OF CORRECT SHAPE.

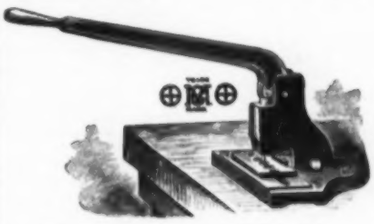
THEY ARE THE MOST DURABLE FILES ON THE MARKET.

SEND FOR OUR ILLUSTRATED CATALOGUE CONTAINING FULL SIZE CUTS.

Henry Disston & Sons, INC.

Keystone Saw, Tool, Steel & File Works, PHILADELPHIA, PENNA.

Morrill's Bench Punch



Simple, Strong, Interchangeable.
Three sized dies: 1/8"-1/4"-3/16". Any size from 1/16" to 3/8" made special.

Chas. Morrill,
270 B'way, New York City.

S. E. McLaughlin, Arcola, Ill., writes: "FOR RESULTS THE AMERICAN ARTISAN BEATS THEM ALL."

A full assortment of these goods for sale by all the leading Hardware and House-furnishing Stores.

(burned in the enamel) ARE SAFE

We claim Purity and Safety, and Substantiate this claim with Chemists' Certificates.

(Reduced fac-simile of label).

Look for this Label (Sustained by U. S. Circuit Court.) Printed on BLUE PAPER and pasted on every Kitchen Utensil made in Genuine AGATE NICKEL-STEEL WARE as a guarantee of Absolute PURITY and SAFETY

NAME OF UTENSIL.

AGATE L & G Mfg. Co. NICKEL-STEEL-WARE

NO.

Patented Feb. 12, 1896.

COST	SELL

Analysis No. 72,339. New York, Dec. 7, 1896.
We have made a careful examination of a sample of "Agate Nickel Steel Ware" received from The Lalance & Grosjean Mfg. Co., Nov. 30, 1896.
The enamel coating is homogeneous, of extra thickness, and great purity.
It is *entirely free from arsenic, lead and antimony*—metals so often found in enameled goods.
Very respectfully,
STILLWELL & GLADDING,
Chemists to the New York Produce Exchange.

Pierre de P. Ricketts, E.M., Ph.D.
John H. Banks, E.M., Ph.D.
Analysis No. 14,180. New York, May 5, 1897.
LALANCE & GROSJEAN MFG. CO.:
Gentlemen—As requested by you, we purchased in the open market a sample of "Agate Nickel Steel Ware" and have made a careful chemical analysis of the enamel covering of the same.
We find this enamel is *absolutely pure and free from Arsenic, Antimony, Lead and other substances injurious to health.* We can therefore recommend it for all culinary and drinking purposes. Respectfully yours,
RICKETTS & BANKS,
Chemists to the N. Y. Metal Exchange.

Guaranteed Double Coated and Absolutely Pure
Copyrighted.

Read carefully the Chemists' Certificates.

Send for pamphlet soon to be issued. Lalance & Grosjean Mfg. Co.
NEW YORK BOSTON CHICAGO

Our line of

"Solid Steel"

polished and tinned goods are trade winners. We are also makers of the popular "Lava Enameled Ware."

Cleveland Stamping & Tool Co., Cleveland, O.

Chas. W. Campbell, Marshall, Minn., writes:

"Please take my ad out of THE AMERICAN ARTISAN. I received more letters than I could answer, and have secured a situation through your valuable paper."

Locations for Industries.

Manufacturing is rapidly developing along the lines of the Chicago, Milwaukee & St. Paul Railway. Industries on a large scale now extend to the Mississippi River with indications of reaching the Missouri. Machinery and all the higher classes of manufactured goods are now being exported from this business territory to all parts of the world.

The Chicago, Milwaukee & St. Paul Railway Company's 6,600 miles of railway, exclusive of second track, connecting track or sidings, traverses eight states, namely:

NORTH DAKOTA	MINNESOTA	NORTHERN MICHIGAN
SOUTH DAKOTA	IOWA	WISCONSIN
Express Passenger Trains, Fast Freight Trains Throughout.	MISSOURI	ILLINOIS

which comprise a territory full of natural resources and advantages. This railway is geographically well located in relation to the great markets and distributing centers. Beyond its lines is a vast and rapidly developing territory extending to the Pacific Coast.

The Company gives unremitting attention to the development of local traffic along its lines and, with this in view, seeks to increase the number of manufacturing plants on its system, either through their creation by local enterprise or the influx of manufacturers from the east. It has all its territory districted in relation to resources, adaptability and advantages for manufacturing. Specific information furnished manufacturers in regard to suitable locations. Address,

LUIS JACKSON,
Industrial Commissioner C., M. & St. P. R'y.
660 Old Colony Bldg., Chicago, Ill.

The Southern Railway and The Mobile and Ohio Railroad

through its Land and Industrial Department invite prospectors, investors, manufacturers and homeseekers to investigate propositions in all lines.

Come and see what splendid opportunities the South affords. Reading matter, maps and detailed information sent free upon application to

M. V. RICHARDS, Land and Industrial Agent, Washington, D. C.
W. L. HENDERSON, Agent, Land and Industrial Dept., St. Louis, Mo.
J. F. OLSEN, Agent, Land and Industrial Dept. 225 Dearborn St., Chicago.

F. W. CARLEY,
Hancock, Wis.,
Writes:

"I received your paper this morning also more letters than I have got time to answer. I will ask you now to please take out my ad, as I have a position now, as tinsmith. I am well pleased with the paper, and am very thankful for the information I have received from it. Every tinner should take it. A man could not afford to be without it for the small price it costs."

OLD DOMINION

Horse Mule Shoes.

All the popular styles and weights.

Illustrated catalogue and prices on application.

Old Dominion Iron and Nail Works,

ARTHUR B. CLARKE, Prest. **Richmond, Va., U.S.A.**

Peoria Washing Machines.

BEST IN THE MARKET.
MADE WITH BALL-BEARINGS.

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.

Send for Catalogue.
Secure the Agency.

CLARK, QUIEN & MORSE,
PEORIA, ILL.

THE ORIGINAL **H. F. Brammer Mfg. Comp'y**

(Incorporated 1888) **DAVENPORT, IOWA.**

MANUFACTURERS OF

The Original Improved Brammer Washer.
The Original O. I. C. Pendulum Washer.
The Original O K Rotary Ball Gearing Washer.

With Gold And Copper Bronzed Hoops And Castings.

WE LEAD. Others imitate. The superiority of our Washers is too well known, and dealers will not be misled by similar machines.

Quotations and particulars will be sent on request.

A Special Hardware Wagon.

Low Down.
Short Turn.
High Wheels.
Saves the Heavy Lifting.
Makes Quick Delivery.
For Prices, Terms, &c., Address,

SHIPMAN, BRADT & CO., **305 North 3d St., DE KALB, ILLS**

TACKS

TOWER M'F'G. CO.
ELM & FRONT STS.
CINCINNATI, O.
MANUFACTURERS

This Lock is always on guard.

You can't forget to lock it.
It locks itself.
Windows open for ventilation are still locked securely.
The Burglar's "Jimmy" can't force this Lock.
Better than a Policeman, in is there all the time.

It never sleeps. But you can.

Send for Catalogue.

HARLEV BURGLAR PROOF VENTILATING SASH LOCK CO.
92 La Salle St., CHICAGO.

Gee Whizz.

(Double reflex, and adjustable.) Washes in one minute what it takes any other machine 10 or 15 minutes.

Noted for its easy running, ease on clothing, and fast, unexcelled work. New Gee Whizz Machines are lined with galvanized metal, thus insuring them not to leak, and to stand any climate. Absolutely guaranteed to give entire satisfaction.

You want the exclusive agency.

Manufactured by

Capt. Randleman & Sons,
DES MOINES, IOWA.

HOMESEEKER EXCURSIONS
On First and Third Tuesdays in each month to

VIRGINIA,

Via NORFOLK & WESTERN RAILWAY.

For all information as to RATES and TICKETS and for LAND PAMPHLETS and descriptive matter, address **ALLEN HULL**, D. P. Agt., Columbus, Ohio.

Henry Bidlake, Osnabrock, N. D., writes:

"Please discontinue ad for Tinners' Tools in your paper. It has done its work well."

NICKEL PLATING OUTFITS.

ZUCKER & LEVETT & LOEB CO
OFFICES. 526. 528. & 530 W. 25TH ST.
NEW YORK. U.S.A.

SEND FOR CATALOGUE OF
NICKEL & ELECTRO PLATING
SUPPLIES & POLISHING MATERIALS

Peters Cartridges

Peters Cartridges

Peters Cartridges

LOADED WITH
KING'S
SEMI-SMOKELESS
POWDER

Hold the World's Records. A FULL LINE OF THIS AMMUNITION FOR RIFLE, REVOLVER AND PISTOL.

AMMUNITION OF TO-DAY.

A FEW OF MANY RECENT VICTORIES — WON

- Indoor Rifle Championship for United States, 1898, 1899, 1900, 1901.
- Interstate Rifle Match, Sea Girt, N. J., 1900.
- Interstate Regimental Team Match, Sea Girt, N. J., 1900.
- Allcomers' Military Match, 1900.
- New Jersey Rifle Ass'n Trophy Match, 1900.
- Winchester Match, Sea Girt, N. J., 1900.
- Revolver Reentry Match and Revolver Team Match, Sea Girt, N. J., 1900.

Ammunition Loaded With **King's Semi-Smokeless Powder,**

MADE HIGHEST SCORES IN International Revolver Match, (America vs. France), 1900. Won the Wimbledon Cup Match (30 shots at 1000 yards), 1900. The Rifle Championship for Greater New York and vicinity (100 shots at 200 yards), 1899-1900.

The above wonderful records tell the whole story of unequaled accuracy, velocity, trajectory and uniformity. **THESE CARTRIDGES NEVER DETERIORATE.** They shoot with little noise and slight smoke, and can be used for a day at a time without the necessity of cleaning the gun. **Peters Cartridges** have been tested, and are now **USED BY THE WORLD'S EXPERTS.**

Handy Book for Shooters and Sportsmen sent free to all applicants.

The Peters Cartridge Co.,

Government Square, Cincinnati, Ohio.

EASTERN BRANCH: T. H. KELLER, Manager, 90 Chambers Street, NEW YORK.

Peters Cartridges

Peters Cartridges

Patent Pending.

Iwan's Perfection Wire Conductor Pipe Hanger.

Best Hanger Ever Invented.

Why It Is The Best:

1st. It holds pipe one inch from building to permit painting.
2d. It looks ornamental.
3rd. It can be used for frame or brick buildings.
4th. It can be used for round or corrugated pipe.
5th. It completely encircles the pipe, holding it firmly on all sides
6th. It is strong and durable.
7th. It is cheaper than any other hanger.
8th. A tinner can put up more pipe in less time than with any other hanger.

The hanger can be tightened as desired by giving the eye a twist. For 2-inch corrugated pipe 2½ inch hanger is required. Other pipe runs uniform.

Also Manufacturers of Iwan's Chimney Top.

Write for Discounts.

Iwan Bros., Mfrs. of Hardware Specialties Streator, Ill.

Write **J. P. Watson & Son, Marshall, Minn.,**

"You will please take out the want advertisement for Tinner you got us one and "FORTY" applicants:'

Lackawanna Railroad

The Scenic Line TO New York City

Palatial Solid Vestibuled Trains
Superb Dining Cars
(Meals a la Carte)
Observation Cars **Latest Pullmans**
Elegant Day Coaches

3 THROUGH TRAINS DAILY from CHICAGO 3

Leaving Chicago	Arriving New York
10.35 a. m.	3.35 p. m. next day.
2.30 p. m.	7.30 p. m. next day.
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Rates $18.00 First Class, $16.00 Second Class

CITY TICKET OFFICE: 103 Adams Street
GEO. A. CULLEN, Gen'l West'n Pass. Agt.
CHICAGO

Steam Heat and Open Fires.

French Lick Springs

In the Indiana Highlands on the

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Hotels Open all the Year Round.
Two Trains Daily from Chicago.
Through Sleeper from Dearborn Station, 9 p. m.
Send for booklet.
City Ticket Office, 232 Clark St.
FRANK J. REED, G. P. A., Chicago.

"Nothing except the mint can make money without advertising."—Gladstone.

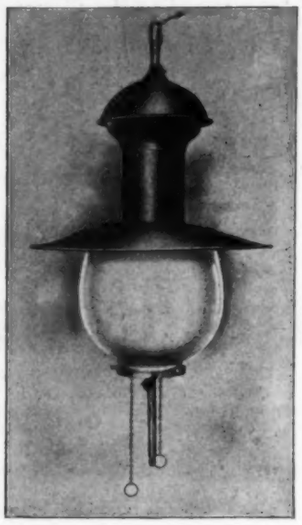
THE UDELL WORKS,

INDIANAPOLIS, IND.

STEP LADDERS, CLOTHES BARS, HOOK RACKS, FOLDING CLOTHES RACKS, TOWEL ROLLS, TOWEL ARMS, ROPE REELS, IRONING STANDS AND BOARDS, FOLDING TABLES, COMMODES, MEDICINE CABINETS.

W. A. STOKES & CO., 30 Warren St., New York.

UDELL-SAMSON WOODENWARE CO., 501 N. Main St., St. Louis, Mo.



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Wonderful Doran Lighting System

Equal in every way to an Electric Arc Light at a cost of about one-tenth as much.

It can be turned up or down at will by simply pulling a chain.

The gasoline is conveyed to the lamp through seamless wire tubing running from a tank situated outside of the building. The tubing is flexible and can be put through crevices, around corners, and concealed the same as an electric light wire.

As many lights as may be desired can be placed on one system.

We Give an Absolute Guarantee for One Year.

Write for catalogue and complete price list.

Acorn Brass Works, Dept. H, 15-23 So. Jefferson St., Chicago, Ill.

Agents wanted in all territory where we are not represented. We protect our agents.

Keene Combination Hose Pipe

A sanitary necessity.
Will throw a solid stream or spray.
A perfect sink spout flusher and stoppage remover.

If your jobber does not handle them write
H. N. KIRK, Keene, N. H.

THE PHILADELPHIA LAWN MOWER CO.

3107, 3109 Chestnut Street,
PHILADELPHIA, PA.
U. S. A.

Send for Illustrated Catalogue.

Twin City Fence and Wire Works.

Manufacturers of all kinds of Ornamental and Architectural Iron and Wire Work, Office Railings, Window Guards, Etc.

Office and Salesroom: **220 East Sixth Street, ST. PAUL, MINN.**

THE NULITE VAPOR GAS LAMPS

For Home, Store and Street.

The Nearest Approach to Sunlight and Almost as Cheap.

ARC ILLUMINATORS 750 CANDLE POWER. 7 HOURS TWO CENTS.

Make your stores light as day. A Hardware house writes us:

"We like your lamps so well we are now working nights instead of days."

We also manufacture **TABLE LAMPS, WALL LAMPS, CHANDELIERS, STREET LAMPS, Etc.** 100 Candle Power seven hours ONE CENT. No wicks. No Smoke. No Odor. Absolutely safe. **THEY SELL AT SIGHT.** Exclusive territory to good agents. ☞ Write for catalogue and prices.

CHICAGO SOLAR LIGHT CO., Dept. 40, CHICAGO, ILL.

Standard Chain Company.

Chain of all Kinds.

Pittsburgh, Pa.

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No handling "dead" matter, nor searching over pages of crossed-off items, as with book records. No re-writing, no transfering. The Y and E Card System is a living record; new cards are put in exactly their proper place—old cards ("dead" matter) are taken out. By having plenty of guides the exact card you want can be gotten almost instantly. No matter what, nor how many, records you keep, the Card System will keep them better and quicker. Send for Cat. No. 27—

Yawman & Erbe Mfg. Co., Rochester, N. Y.

New York Chicago Boston St. Louis
Philadelphia Pittsburg Toronto
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Farwell, Ozmun, Kirk & Co.

WHOLESALE HARDWARE. St. Paul, Minn.

Favorite Stoves and Ranges,
Tinware and Tinners' Tools,
Gilt Edge Hardware Specialties,
Butcher Supplies,
Builders' Hardware, Sporting
Paints and Oils. Goods.

"Yankee" Screw Drivers

No. 12—RATCHET, WITH STUB BLADE

No. 11—RATCHET, RIGHT AND LEFT HAND AND RIGID

No. 15—RATCHET, WITH FINGER TURN ON BLADE

No. 30—SPIRAL RATCHET, RIGHT AND LEFT HAND AND RIGID

HAVE NO EQUALS.

THEY ARE SOLD BY LEADING JOBBERS.

Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

English Pots

Made in 1, 2, 3, 4, 6 and 8 gallon sizes, weighing 5, 9, 13, 14, 23 and 25 pounds, respectively.

We have the largest and best equipped factory in the south for the manufacture of Sad Irons, Country and Stove Hollow Ware. Ground and Unground. Sugar Kettles, English Pots, Cast Iron Shoe Lasts and Stands, Kitchen and Corner Sinks, Grates, &c.

Blacklock Foundry, South Pittsburg, Tenn.

CHAS. E. MARIS, Williamsburg, Ia., WRITES: "THE AMERICAN ARTISAN certainly has a large circulation from the inquiries I received."

The Miller Catalogue Cabinet Co.

ROY MILLER, Pres. H. KELLY, Sec.

SYSTEMATIC FILING DEVICES

For Catalogues, Price Lists, Etc.

Box 49, ALMA CENTER, WIS. 39-41 Cortlandt St. NEW YORK.

SEND FOR CIRCULARS.

Dividends

are paid out of the profits of a business. Stockholders expect dividends. Economic management creates profits. Shippers and manufacturers can pay larger dividends by being located on

The Indiana, Illinois & Iowa R. R.

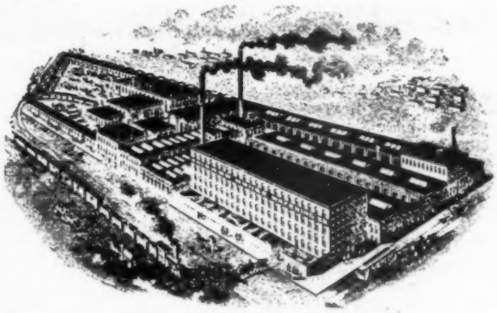
WHY? *Because* if you were on its line there would be

No switching charges.
No teaming expense.
From one to five days' time saved in the receiving and shipping of your products.
This is worth looking into.
Your increased business means more earnings for the Railroad Company.
Your interests and ours become mutual.
Some desirable manufacturing sites can be had free of cost to you.
Write or call for further particulars.

The
Indiana, Illinois & Iowa R. R.
573 The Rookery,
Chicago, Ill., U.S.A.

MERCHANDISE FROM

Sheriffs' AND Receivers' Sales.



THE

World's Bargain House.

We are headquarters for New Stocks of Hardware that we secure from the various Sales we are constantly attending. **NOTE SOME OF OUR OFFERS:**

SHOVELS.

We bought at Manufacturers' Sale 750 dozen that we offer at extremely low figures.

No. 616 "D" Handle Square Point Shovels (like cut) **Per Doz. $5 25**
No. 617 "D" Handle Scoops, 13-inch Width, " " 5.50
And 10 Other Patterns.

HORSE AND MULE SHOES.

We have on hand an enormous quantity of Horse and Mule Shoes. They represent our purchases made at sheriffs', receivers' and manufacturers' sales There are some excellent grades.

LIGHT SHOES—bought from a Chicago maker—all perfect—sizes 0 to 2. **Per Keg, $2.50.**

HEAVY SHOES—The best on the market—all perfect—sizes 4 to 7. **Per Keg, $2.60.**

A COMBINATION MONKEY WRENCH.

We bought 5,000 of them at Manufacturers' Sale.

They are malleable iron. Length, closed, 9 inches. This cut speaks for itself, and shows the various different purposes to which this wrench can be put—monkey wrench, hexagon end, round in the center, and hammer head. It is made of 3 pieces and is a thoroughly practical and indispensable tool.

Per dozen, - - - - 90c.

PADLOCKS.

Bought at Manufacturers' Sale

Finished in Bronze Enamels.

Equal in point of strength and general utility to the most high priced padlocks.

Owing to the peculiar shape of the key and key-hole channel, the "New Idea" Padlock is practically proof against being operated without its corresponding number key. Size of "New Idea" Padlock, 2¼ inches in diameter, ⅝ inch thick. Twelve combinations to the dozen. Attractively put up in half dozen boxes, 1 and 2 gross cases. Its worth is positive and instantly recognized at a glance. It is of wonderful strength, the key enters the lock in a circle, rendering "picking" impossible; is of small size and attractive appearance.

PER GROSS, $6.75.

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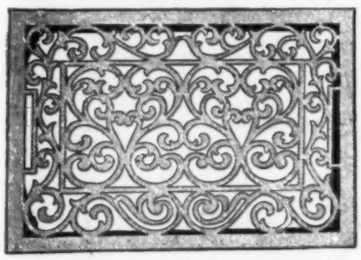

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We will sell them at 75 and 10 per cent. off the old list.

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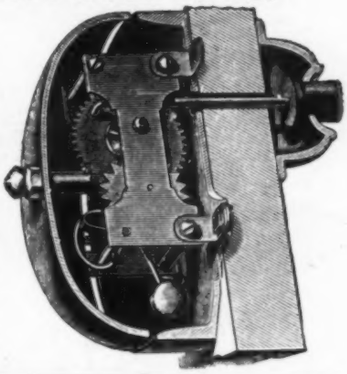

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we took of the demoralized freight rates from eastern points to Omaha the past year enables us to offer the trade some unusually attractive prices. The warring railroads have shaken hands, however, and the prospect is that a rigid rate will be maintained which will probably force higher values for hardware staples such as nails, etc. The shrewd western dealer will take time by the forelock and stock up now. Our prices are right, our goods are right and shipments are prompt.

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Simeon L. and George H. Rogers Company,

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The Galesburg Cornice Wks.,
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Star Cream Separator

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Stays where you put it, and is absolutely soot and smoke proof.
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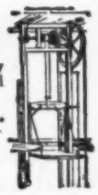

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Will lay out patterns for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammell. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction. Price, complete in a nice wooden box with Chart, $4.00 net cash. (Mention THE AMERICAN ARTISAN.)

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